Norsk Regnesentral
NORWEGIAN COMPUTING CENTER

Note

XML structures (v2.0): Byggsøk and Sentral godkjenning

Statens bygningstekniske etat
(Revised version)

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Abstract

This report documents the XML Schemas for "Byggsøk", "Sentral godkjenning", and all auxiliary Schemas. The Schemas define valid documents to be used in applications managed by Statens bygningstekniske etat.

Since Byggsøk version 1.x has existed for some years, the new version described in this report has been given the version number 2.0. The differences between version 1.x and 2.0 are extensive. Since "Sentral godkjenning" has not existed as a XML documents before, one option would have been to give the "Sentral godkjenning" XML Schemas version number 1.0. But it was decided also to give it version number 2.0 because it is part of the same code base as the new Byggsøk Schemas.

The XML Schemas described in this report are in accordance with the new law taking effect from 1. July 2010: "LOV 2008-06-27 nr 71: Lov om planlegging og byggesaksbehandling (plan- og bygningsloven)" with associate administrative regulations: FOR-2010-03-26-489 ("Forskrift om tekniske krav til byggverk- Byggteknisk forskrift") and FOR-2010-03-26-488 ("Forskrift om byggesak- byggesaksforskriften").

This version of the document is updated with latest changes in the XML Schema code, changes made on 27. June and 8. July 2011.

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1 Introduction

This report contains documentation of the XML Schemas as they are defined for "ByggSøk" and "Sentral godkjenning". These schemas will be used in applications managed by Statens bygningstekniske etat[1].

Thor Kristoffersen at Norsk Regnesentral has developed the XML Schema code based on specifications provided by Anna Schultz at Statens bygningstekniske etat for Byggsøk and by Johnny Korsnes and Tom S. Berge at Statens bygningstekniske etat for Sentral godkjenning. This documentation is written by Arne-Kristian Groven at Norsk Regnesentral.

Since Byggsøk version 1.x has existed for some years, the new version described in this report has been given the version number 2.0. The differences between version 1.x and 2.0 are extensive. Since "Sentral godkjenning" has not existed as a XML documents before, one option would have been to give the "Sentral godkjenning" XML Schemas version number 1.0. But it was decided also to give it version number 2.0 because it is part of the same code base as the new Byggsøk Schemas.

The XML Schemas described in this report are in accordance with the new law[2] taking effect from 1. July 2010: "LOV 2008-06-27 nr 71: Lov om planlegging og byggesaksbehandling (plan- og bygningsloven)" with associate administrative regulations: FOR-2010-03-26-489 ("Forskrift om tekniske krav til byggverk- Byggteknisk forskrift") and FOR-2010-03-26-488 ("Forskrift om byggesak- byggesaksforskriften").

The XML Schemas have been created with Altova XML Spy[3], an XML authoring tool In this report, the textual XML Schema components are mostly presented as extracted diagrams. This is done to ease the overview and hide all the details. But before presenting the XML Schemas as diagrams some background information about XML Schemas will be given.

1.1 XML Schemas

A schema is a collection of metadata consisting of a set of schema components, mainly element and attribute declarations, together with complex and simple type definitions. These components are usually created by processing a collection of schema documents, which contain the source language definitions of these components.

The schemas for "ByggSøk" and "Sentral godkjenning" are written in W3C's XML Schema language and are also known as XSD, XML Schema Definition, or XSDL, XML Schema Definition Language. A document written in the XML Schema language is stored with the ".xsd" filename extension. The Schema documents presented in this report are stored in the following files:

- *byggesak.xsd*, containing the schema for "ByggSøk"

[1] See http://www.be.no/

[2] See http://www.regjeringen.no/mobil/nb/dep/krd/tema/bolig-_og_bygningspolitikk/byggesak/ny-plan--og-bygningslov.html?id=610294&ignoredevice=true

[3] See www.altova.com for more information about the tool.

- *sentralgodkjenning.xsd*, containing the schema for “Sentral godkjenning”
- *pbl.xsd*, containing the umbrella schema for the other two
- *common.xsd*, containing components (defined as simple and complex types) used in both in sentralgodkjenning.xsd and byggesak.xsd
- *sgikt.xsd*, used in sentralgodkjenning.xsd
- *faktura.xsd*, used in sentralgodkjenning.xsd

Like other XML schema languages, XSDL, is used to express a set of rules to which an XML document must conform in order to be considered 'valid' according to that schema. The XML Schema language is defined using XML itself.

Schema documents are organized by namespace. A schema document may *include* other schema documents for the same namespace, and may *import* schema documents for a different namespaces. Namespaces are nicknamed using a name prefix. In Figure 1 the following prefixes are used: “xs”, “be”, “bygningns”, “adressens”, and “personns”.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" xmlns:bygningns="
http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/bygning" xmlns:adressens="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse" xmlns:personns="
http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/person" targetNamespace="http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified" attributeFormDefault=
unqualified" version="2.0">
  <xs:include schemaLocation="common.xsd"/>
  <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse" schemaLocation="matrikkel\adresse.xsd"/>
  <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/bygning" schemaLocation="matrikkel\bygning.xsd"/>
  <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/person" schemaLocation="matrikkel\person.xsd"/>
  <xs:element name="byggesak">
    <xs:annotation>
      <xs:documentation>Byggesak.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="sak" minOccurs="0">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="typetiltak" type="be:TiltakType" minOccurs="0">
                <xs:annotation>
                  <xs:documentation>Type tiltak.</xs:documentation>
                </xs:annotation>
              </xs:element>
                    ⋮
              <xs:attribute name="id"/>
            </xs:complexType>
          </xs:element>
          <xs:element name="arkiv" minOccurs="0"/>
        </xs:sequence>
        <xs:attribute name="identifier" type="xs:string" use="required"/>
      </xs:complexType>
    </xs:element>
      ⋮
</xs:schema>
```

Figure 1 XML Schema excerpt from byggesak.xsd

All the named schema components belong to a target namespace, and the target namespace is a property of the schema document as a whole. For the XML Schema components documented in

this report, the target namespace is http://www.be.no/xml/ns/byggsak/2.0 and the name prefix for the target namespace is "be".

Figure 1 illustrates (the structure of) one of the XML Schema documents described in this report, namely *byggsak.xsd*. This schema document consists of about 1600 lines of code. The root of the XML schema document capture everything between the opening tag, <*xs: schema…*> and the last closing tag, <*/xs schema*>. In order to be a schema, the W3C XML Schema namespace has to be included as an attribute in the opening tag. The W3C XML Schema namespace, prefixed "xs", contains all XML Schema element and data type definitions.

An opening tag, like <*xs: schema…*> and the associated closing tag, <*/xs schema*> are similar to parenthesis or bracket structures, where the start parenthesis is the opening tag and the end parenthesis is the closing tag. In between <*xs: schema…*> and <*/xs schema*> there are other types of parenthesis structures defining various kinds of XML Schema components. In Figure 1, one of these a component having <*xs: element name="byggesak"*> as the opening tag and with <*/xs: element*> as the closing tag. This defines an XML Schema *element* that has been given the name "byggesak". The "byggesak" element consists of yet other elements (parenthesis structures) inside. We say "byggesak" is a nested element (structure), and the elements defined within "byggesak" represents its child elements. Eventually there are elements not containing other elements inside. We call these leaf elements in this report.

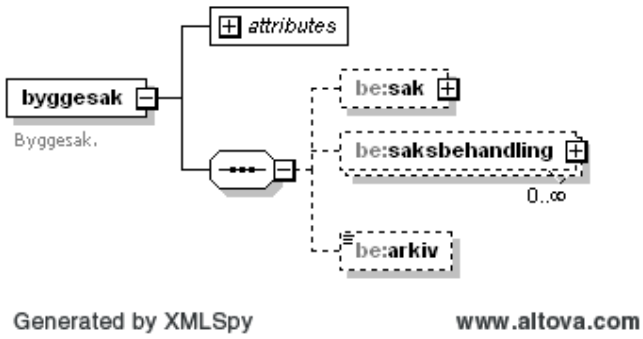
In the case of XML Schemas, the nested elements can be defined as complex types and the leaf elements of simple data types. A simple data type is an element consisting of a (textual) value, which is a text string possibly undergoing certain restrictions: In the XML Schema namespace there are definitions of the typical datatypes, like boolean, integer, string etc. One can for XML Shemas freely define new complex and simple data types, based everything that is derived from everything that is predefined in the XML Schema namespace.

In XML Schema documents, elements defined as children of the xs:schema root element are said to be defined globally, such as "byggesak". These elements must be referenced globally in order to appear in a valid XML document. Their child elements are locally defined, which means they can only be referenced within the scope of their parent. Hence only globally defined elements are associated with the target namespace per default. But this can be manipulated by setting "elementFormDefault" attribute is set to "qualified", as is the case in Figure 1. By setting it to "qualified", all the locally declared elements will be associated with the target namespace.

1.2 How to understand the diagrams

As already described, nested XML Schema elements can be defined, i.e., they contain other elements within them, which again might contain other elements, finally reaching leaf elements containing certain basic values.

Such structures can be represented graphically as tree structures. In case of "byggesak" it looks like the following:



This diagram is auto-generated from the Altova XMLSpy tool. This way of showing XML elements hide details, compared to the presenting the whole XML Schema code and enhance the overview. All diagrams shown in this report are auto-generated from the XMLSpy tool, and then possibly edited manually.

The root of the structure reflects the outermost parenthesis structure, in this case it is named "byggesak". It consists of a sequence of three direct child elements, of which "sak" and "saksbehandling" are nested elements, and "arkiv" is not. The details of the nested structures "sak" and "saksbehandling" are here hidden in the diagram and a '+' sign appears instead. Dotted lines indicate that the element is not obligatory, it is optional. The fact that "byggesak" contains attributes is shown in the diagram, also here hiding the details. In case of the element "saksbehandling", it might occur zero or more times. The following symbol represent the <xs: sequence>…. </xs: sequence> construct, i.e., elements listed after each other in a sequence:

One additonal diagram symbol should be mentioned:

This symbol represents the <xs: choice>…. </xs: choice> construct, representing a selection between elements.

2 The top level XML schema structure (pbl.xsd)

2.1 Namespaces

The file heading is shown below, giving an overview of the namespaces used:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" xmlns:na4="
http://www.arkiwerket.no/Noark4-1-WS-WD/types" xmlns:na4felles="http://w3.brreg.no/seres/ks/skjemaresultat/felles/felles-v01" targetNamespace="
http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified" attributeFormDefault="unqualified" version="2.0">
   <xs:include schemaLocation="sentralgodkjenning.xsd"/>
   <xs:include schemaLocation="byggesak.xsd"/>
   <xs:import namespace="http://www.arkiwerket.no/Noark4-1-WS-WD/types" schemaLocation="ks-resultat-xml\noark4_1_be_types.xsd"/>
   <xs:import namespace="http://w3.brreg.no/seres/ks/skjemaresultat/felles/felles-v01" schemaLocation="ks-resultat-xml\felles-v01.xsd"/>
```

2.2 Overview

The XML Schema document of *pbl.xsd* consists of only a few lines of code, as illustrated in Figure 2.

The overall XML structure is in conformance with KS Resultat XML using attributes imported from the KS Resultat XML namespace, that is prefixed “na4felles” in the code. The structure is as follows: At the top level there is a complex element called “result”, of type be:Result. (in the rest of the report the be prefix is skipped). This is further branched into “fagsystemdata” and “arkivdata”. (See Figure 3 for more details.)

Two variants of “fagsystemdata” are available, an element structures called “byggesak” and “sentralgodkjenning”. They are defined in separate files, *byggesak.xsd* and *sentralgodkjenning.xsd*, and will be described in detail later in this report. They define valid documents that can be created using either the “Byggsøk” or the “Sentral godkjenning” web interfaces.

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
3  <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" xmlns:na4="
   http://www.arkiwerket.no/Noark4-1-WS-WD/types" xmlns:na4felles="http://w3.brreg.no/seres/ks/skjemaresultat/felles/felles-v01" targetNamespace="
   http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified" attributeFormDefault="unqualified" version="2.0">
4     <xs:include schemaLocation="sentralgodkjenning.xsd"/>
5     <xs:include schemaLocation="byggesak.xsd"/>
6     <xs:import namespace="http://www.arkiwerket.no/Noark4-1-WS-WD/types" schemaLocation="ks-resultat-xml\noark4_1_be_types.xsd"/>
7     <xs:import namespace="http://w3.brreg.no/seres/ks/skjemaresultat/felles/felles-v01" schemaLocation="ks-resultat-xml\felles-v01.xsd"/>
8     <xs:element name="result" type="be:Result"/>
9     <xs:complexType name="Result">
10      <xs:sequence>
11        <xs:element name="fagsystemdata">
12          <xs:complexType>
13            <xs:choice>
14              <xs:element ref="be:sentralgodkjenning"/>
15              <xs:element ref="be:byggesak"/>
16            </xs:choice>
17          </xs:complexType>
18        </xs:element>
19        <xs:element name="arkivdata" minOccurs="0">
20          <xs:complexType>
21            <xs:sequence>
22              <xs:element name="noarksak" type="na4:NoarksakType" minOccurs="0"/>
23              <xs:element name="journpost" type="na4:JournpostType"/>
24            </xs:sequence>
25          </xs:complexType>
26        </xs:element>
27      </xs:sequence>
28      <xs:attributeGroup ref="na4felles:KSResultAttributter"/>
29    </xs:complexType>
30  </xs:schema>
31
```

Figure 2 The (entire) XML Schema code contained in pbl.xsd

The element “arkivdata” refers to Noark 4 specific archival data used in the Norwegian public sector. The Noark 4 namespace is imported here, with the prefix “na4”. The sub-elements “noarksak” and “journalpost” cover a subset of the full Noark 4 standard, to be used in the public case handling.

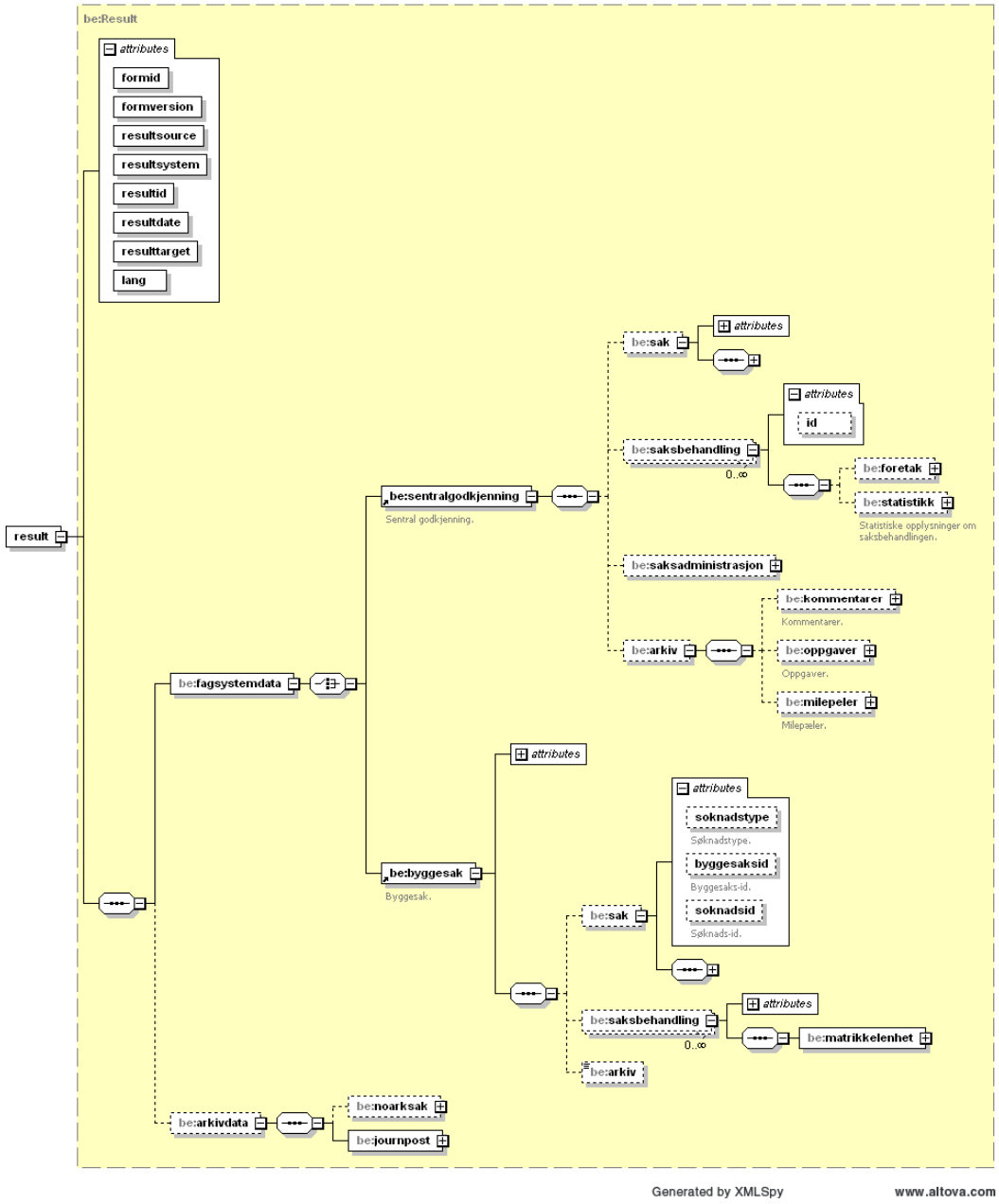


Figure 3 Overview of element structure 'result' of type Result.

2.2.1 arkivdata (element)

The nested element "arkivdata" consists of two substructures, "noarksak" and "journpost" respectively. The "journpost" element illustrated in Figure 4, of type JournpostType, represents the Noark 4 concept "journalpost", defining (archival) records metadata for Norwegian public case handling. The element "noarksak", illustrated in Figure 5, is of type NoarksakType and represents archival metadata at the Noark 4 case level. Each case contains several records documenting interactions and decisions associated with that case.

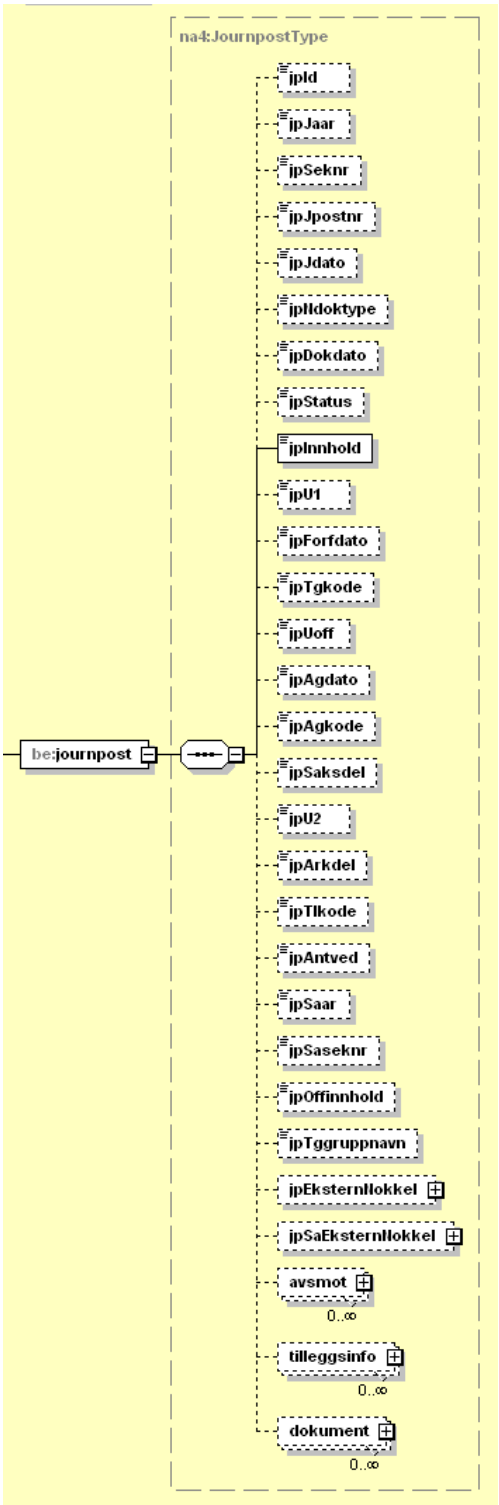


Figure 4 The 'journalpost' (records) metadata represented as a nested element called 'journpost' of type JournpostType.

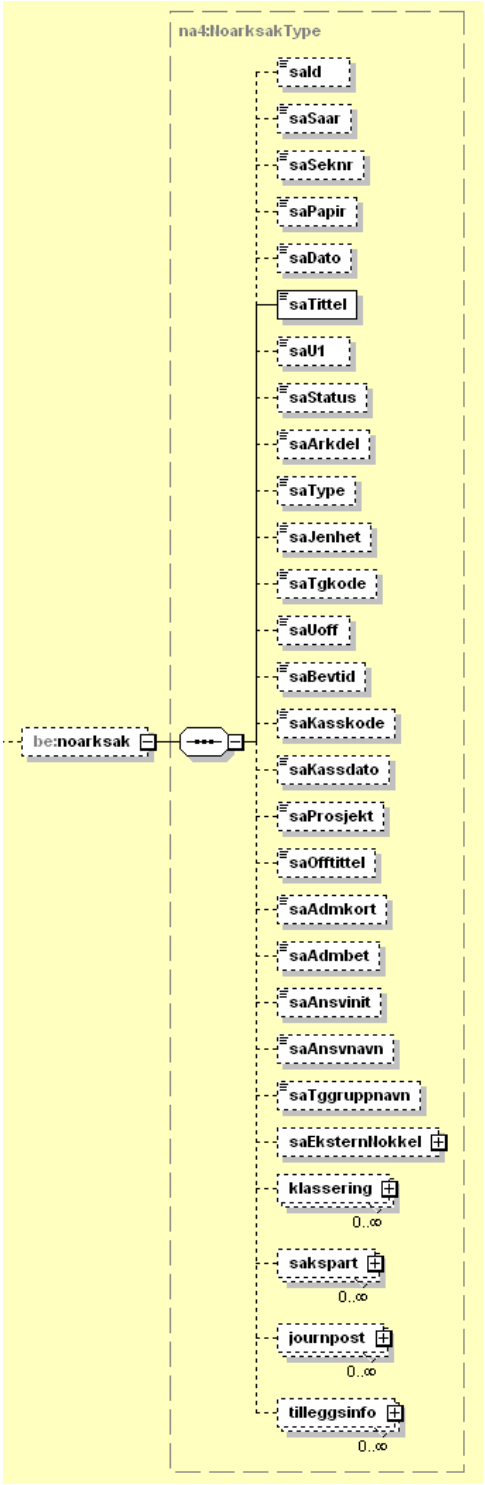


Figure 5 The 'sak' (case) metadata represented as a nested element called 'noarksak' of type NoarksakType.

3 Sentral godkjenning (sentralgodkjenning.xsd)

3.1 Namespaces

The file heading is shown below, giving an overview of the namespaces used:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" targetNamespace="
http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified" attributeFormDefault="unqualified" version="2.0">
    <xs:include schemaLocation="common.xsd"/>
```

3.2 Overview

The nested element “sentralgodkjenning” is illustrated in Figure 6. It consists of four sub-elements: “sak”, “saksbehandling”, “saksadministrasjon”, and “arkiv”. The + sign on the leaf nodes (to the right) in Figure 6 indicates that these are actually roots in yet other nested element sub-element structures.

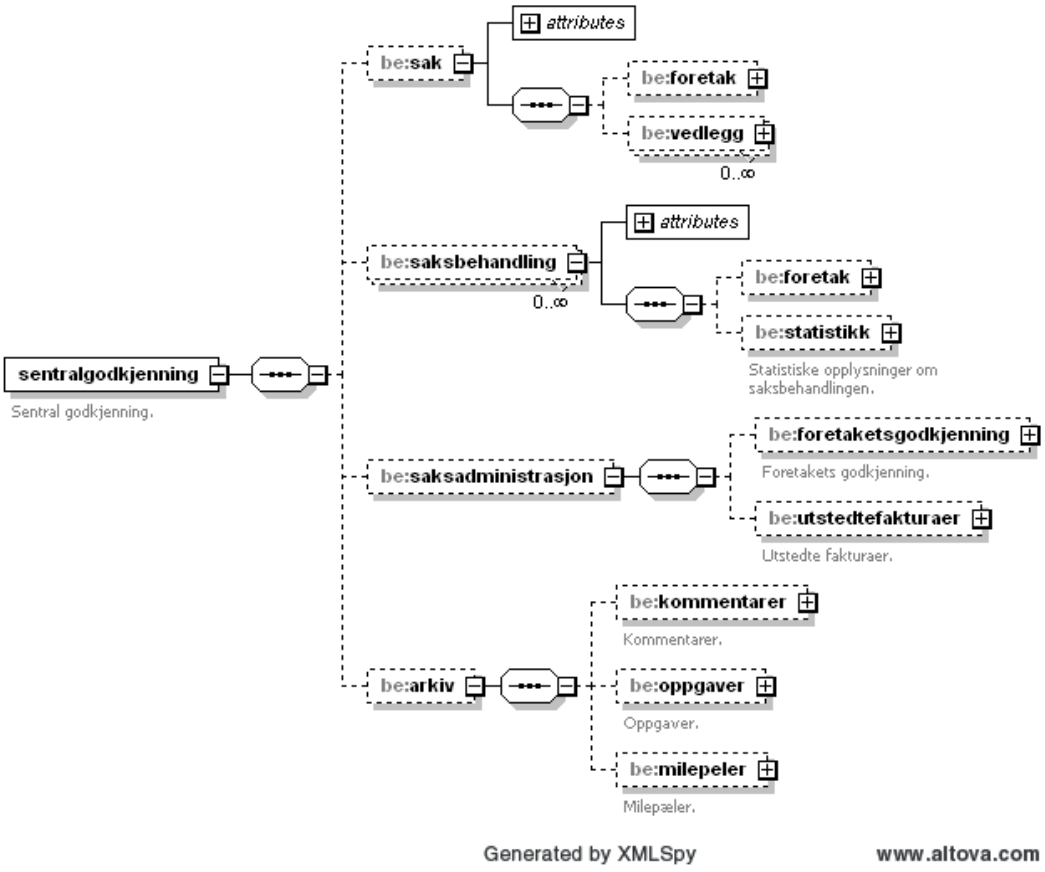


Figure 6 The overall element structure of ’sentral godkjenning’

3.3 sak (element)

The structure of the nested element “sak” is illustrated in Figure 7.

It is associated with an attribute called ‘soknadstype’ with a value range defined as as an enumeration type called “SGSoknadstypeType”, see section 7.3.30. Here each value of the

enumeration represent one possible type of application available for organizations applying for “sentral godkjenning”.

Further, It consists of the following sequence of elements:

- “foretak” of type ForetakType (see section 7.2.15)
- “vedlegg” of type VedleggType (see section 7.2.34)

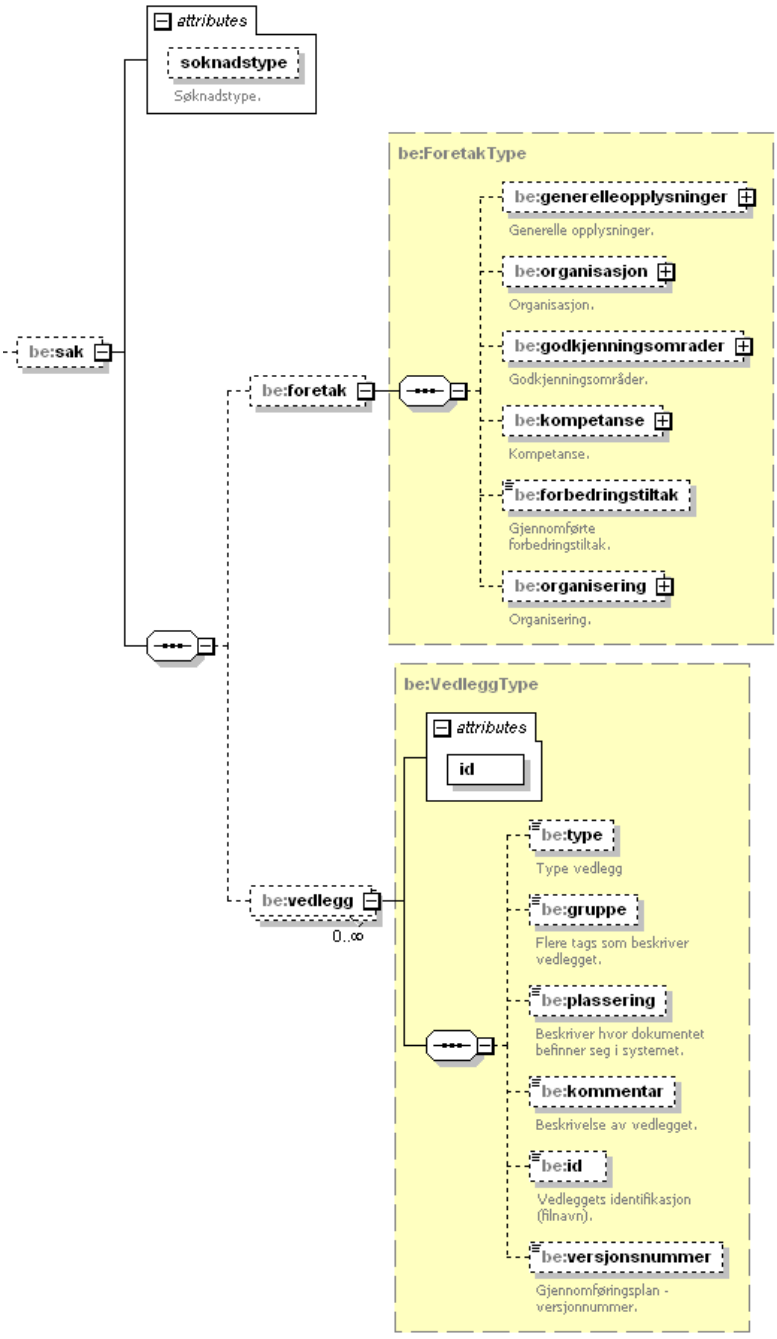


Figure 7 The (nested) element structure ’sak’ within ’sentralgodkjenning’.

3.4 saksbehandling (element)

The nested element structure called “saksbehandling” is illustrated in Figure 8.

It has an attribute called “id”.

Each of the sub elements of will be presented in the following subsections.

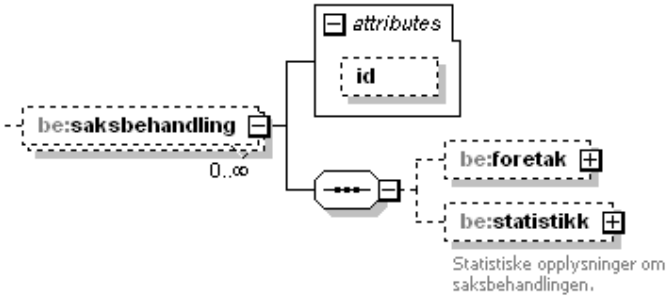


Figure 8 Element structure 'saksbehandling' within 'sentralgodkjenning'.

3.4.1 foretak

The nested element structure ”foretak” is illustrated in Figure 9. The sub structures will be presented in the following.

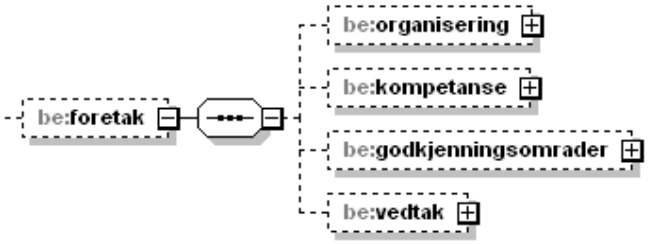


Figure 9 Element structure 'foretak' within 'saksbehandling'

3.4.1.1 organisering

The nested element structure ”organisering” is illustrated in Figure 10.

One attribute “idref” is associated.

Further, it consists of the following sequence of elements:

- “organisasjonsplanok” of type “GodkjentMedBegrunnelseType” (see section 7.2.16)
- “systemopplysningerok” of type “GodkjentMedBegrunnelseType” (see section 7.2.16)
- “andresystemopplysningerok” of type “GodkjentMedBegrunnelseType” (see section 7.2.16)

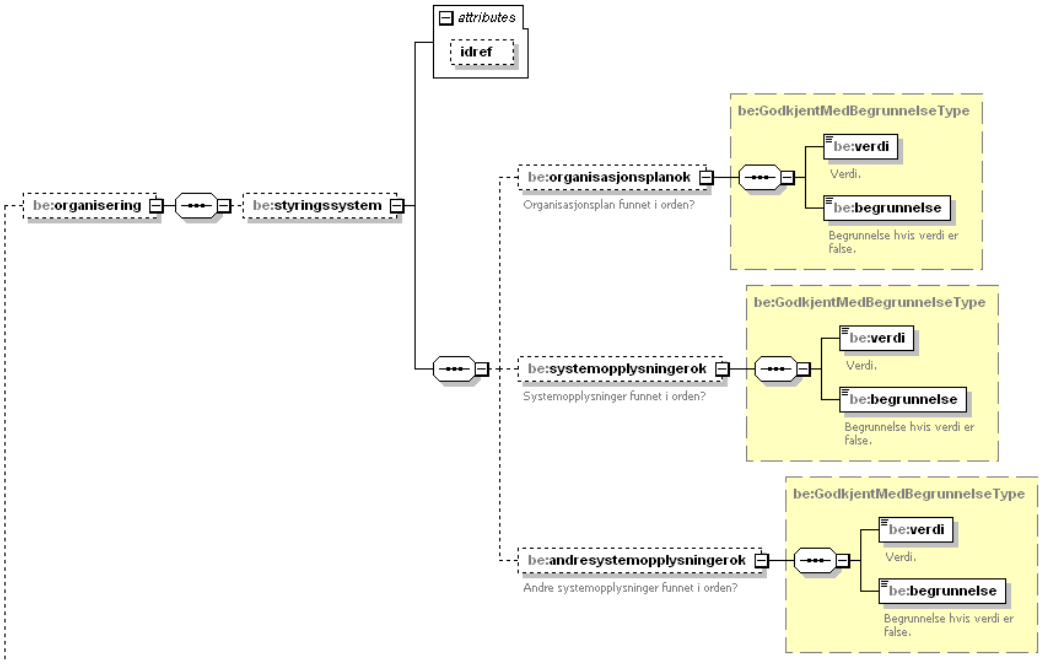


Figure 10 Element structure 'organisering' within 'saksbehandling' in 'sentralgodkjenning'

3.4.1.2 kompetanse

The nested element structure "kompetanse" is illustrated in Figure 11.

One attribute "idref" is associated.

It consists of the following leaf elements:

- "referanseprosjektvurderttil" of simple type "VurderingAvReferanseprosjektType" (see section 7.3.39)
- "referanseprosjektbegrunnelse" of type string

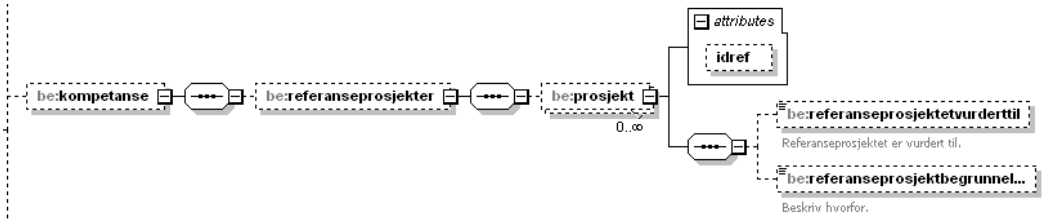


Figure 11 Element structure 'kompetanse' within 'saksbehandling' in 'sentralgodkjenning'

3.4.1.3 godkjenningsomrader

The nested element structure "organisering" is illustrated in Figure 12.

Also here, the attribute "idref" is associated.

It consists of the following leaf elements:

- "vurdering" of simple type "VurderingAvGodkjenningsomraderType" (see section 7.3.40)
- "vedtakstekst" of type string
- "innvilgesnedjustert"is an enumeration over the values 1 and 2

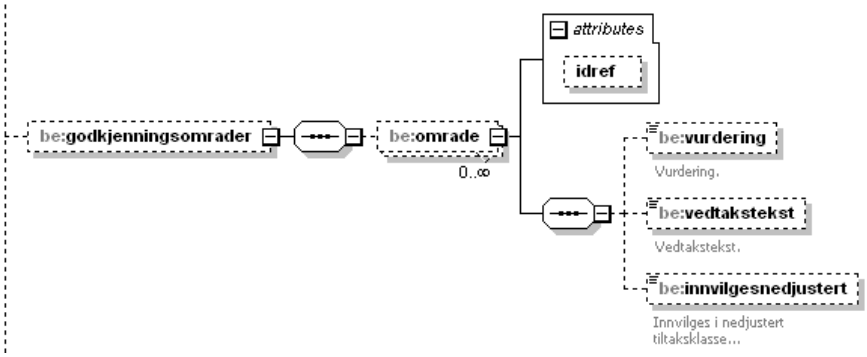


Figure 12 Element structure 'godkjenningsomrader' under 'saksbehandling' in 'sentralgodkjenning'

3.4.1.4 vedtak

The nested element structure "vedtak" is illustrated in Figure 13.

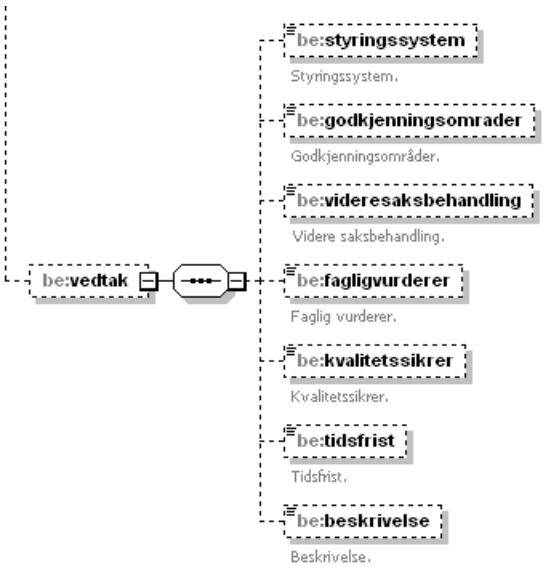


Figure 13 Element structure 'vedtak' within 'saksbehandling' in 'sentralgodkjenning'

It consists of the following sequence of elements:

- "styringssystem" of type string
- "godkjenningsomrader" of type string
- "videresaksbehandling" of simple type "VidereSaksbehandlingType" (see section 7.3.36)

- “fagligvurderer” of type string
- ”kvalitetssikrer” of type string
- “tidsfrist” is of type date
- ”beskrivelse” of type string

3.4.2 Statistikk

The nested element structure ”statistikk” is illustrated in Figure 14. It currently consists of one element called “saksbehandlingstid”.

(This structure was included 8. July 2011.)

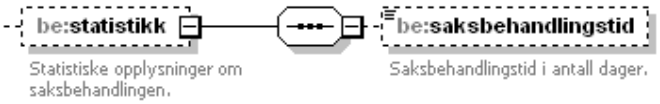


Figure 14 Element structure ’statistikk’ within ’saksbehandling’

3.5 saksadministrasjon (element)

The nested element structure ”vedtak” is defined as illustrated in Figure 15.

It consists of the following leaf elements:

- “status” of simple type “GodkjenningsstatusType” (see section 7.3.17)
- “vedtakdato” of type date
- “godkjenttil” of type date
- ”produsertdato” of type date
- “ordrenummer” of type integer

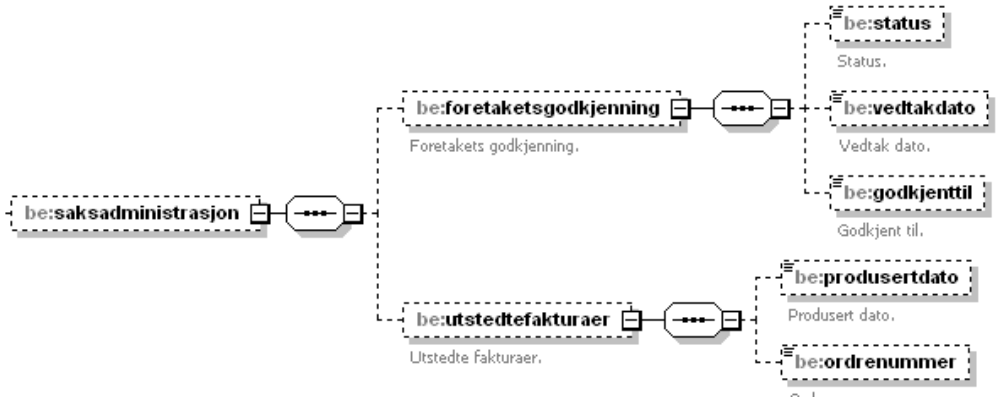


Figure 15 Element structure 'saksadministrasjon' within 'sentralgodkjenning'.

3.6 arkiv (element)

The nested element structure "arkiv" is defined as illustrated in Figure 16. The element "arkiv" refers to information relevant for archiving, but at the same time not necessarily covered by the Noark 4 archival standard.

The element tree structure in Figure 16 consist of three sub structures below the root "arkiv". One is called "kommentarer", the other is called "oppgaver", and the third is called "milepeler".

The neste element structure "kommentarer" has the following leaf elements:

- "nummer" of type "nonNegativeInteger
- "saksbehandler" of type string
- "registrertdato" of type date
- "kommentar" of type string

The neste element structure "oppgave" as has the following leaf elements:

- "nummer" of type "nonNegativeInteger
- "oppgavetype" of type "VidereSaksbehandlingType"(see section 7.3.36)
- "gittav" of type date
- "fordelttil" of type date
- "registrertdato" of type date
- "utfortdato" of type date
- "beskrivelse" of type string

The neste element structure "milepel" has the following leaf elements:

- "nummer" of type "nonNegativeInteger
- "beskrivelse" of type string
- "status" of type string
- "fullført" of type date

- "ansvarlig" of type string
- "frist" of type date

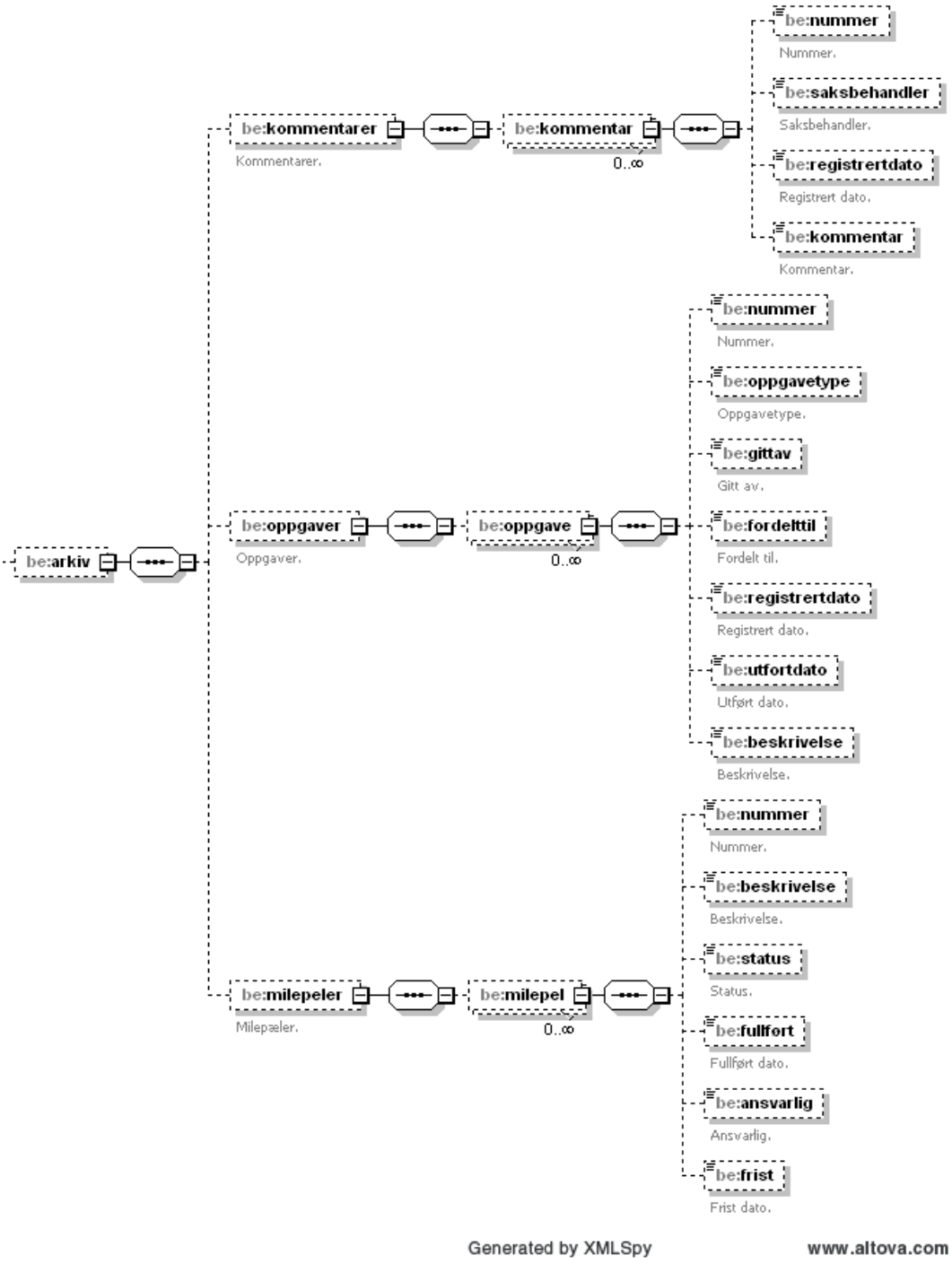


Figure 16 Element structure 'arkiv' within 'sentralgodkjenning'.

4 byggesak (byggesak.xsd)

4.1 Namespaces

The file heading is shown below, giving an overview of the namespaces used:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" xmlns:bygningns="
http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/bygning" xmlns:adressens="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse" xmlns:personns="
http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/person" targetNamespace="http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified"
attributeFormDefault="unqualified" version="2.0">
    <xs:include schemaLocation="common.xsd"/>
    <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse" schemaLocation="matrikkel\adresse.xsd"/>
    <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/bygning" schemaLocation="matrikkel\bygning.xsd"/>
    <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/person" schemaLocation="matrikkel\person.xsd"/>
```

4.2 Overview

The nested element “byggesak” is illustrated in Figure 17.

It consists of three element sub-structures:

- “sak”
- “saksbehandling”
- “arkiv”.

These names are the same as for “sentralgodkjenning”. But despite of similar names, they are different in structure.

The nested element “byggesak” also contains an attribute called “identifier” of type string.

Like for the illustrations in the previous chapters, the + sign associated with the leaf nodes (to the right) in Figure 17 indicates that details are hidden. The leaf nodes with a + sign are roots in yet other nested element sub structures.

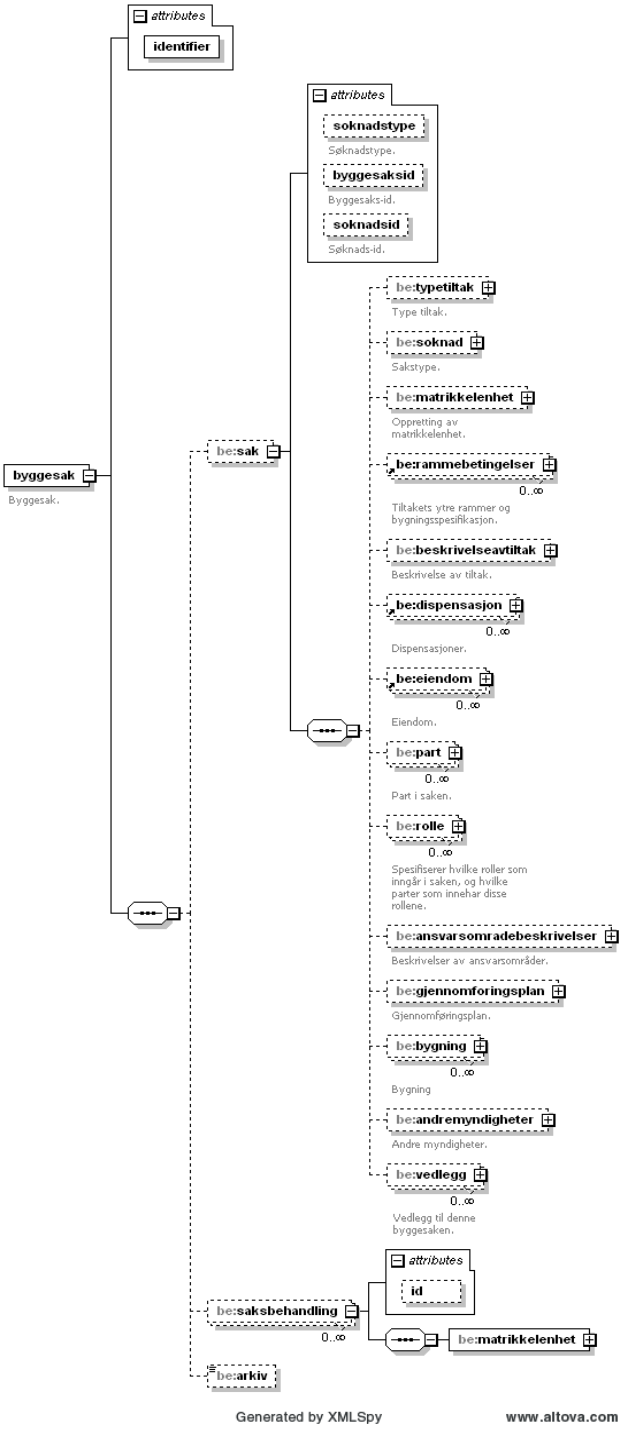


Figure 17 The element structure of 'byggesak'

4.3 sak (element)

The nested element structure called "sak" is illustrated in Figure 18.

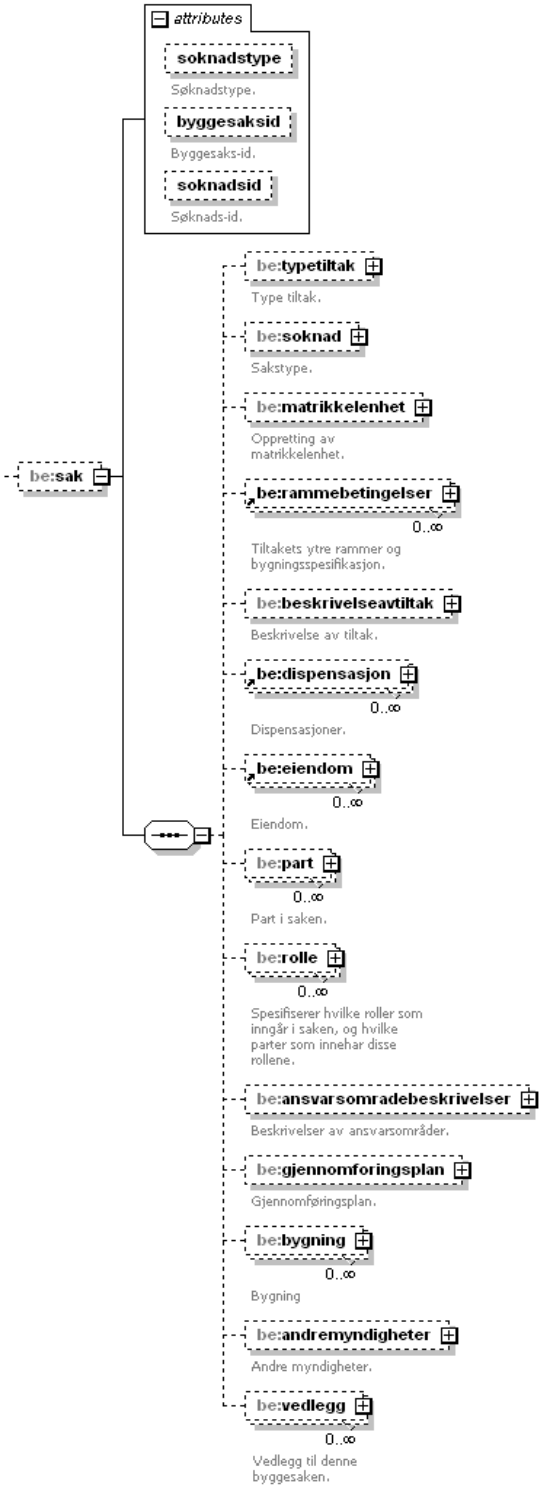


Figure 18 Element structure 'sak' witin 'byggesak'

This structure has three attributes associated:

- "soknadstype" of type BSSoknadstypeType (described in section 7.3.7)

- "byggesaksid" of type string
- "soknadsid" of type string

All the direct subelements of "sak" are themselves nested, representing subtrees with details that are hidden in Figure 18, hence the + signs. All these details will be presented in the following sub sections.

4.3.1 typetiltak

The nested element structure "typetiltak" is defined as illustrated in Figure 19.

It is defined to be of the complex type "TiltakType" (see section 7.2.31).

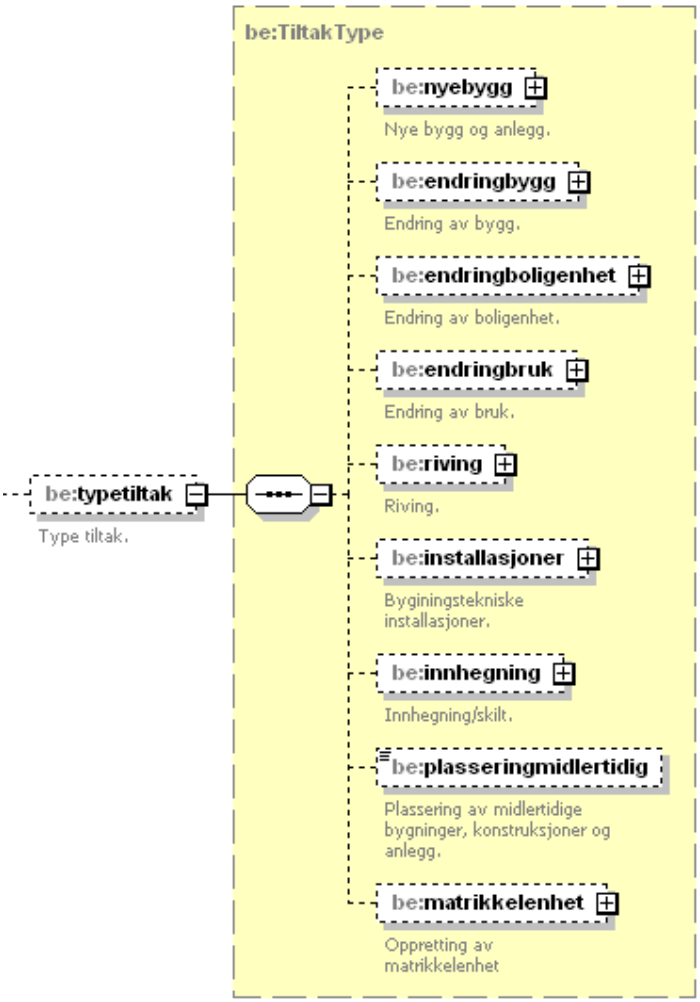


Figure 19 Element structure 'typetiltak' within 'sak' in 'byggesak'

4.3.2 soknad

The nested element structure "soknad" is defined as illustrated in Figure 20.

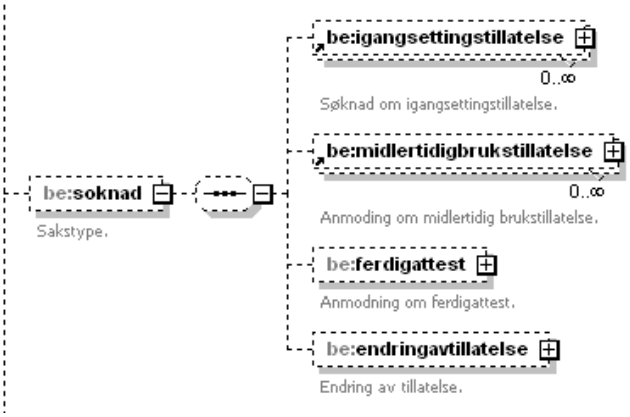


Figure 20 Element structure 'soknad' within 'sak' in 'byggesak'

It consists of four sub structures to be described in the following.

4.3.2.1 Igangsettingstillatelse

One of these substructures is described in Figure 21. It is called"igangsettingstillatelse".

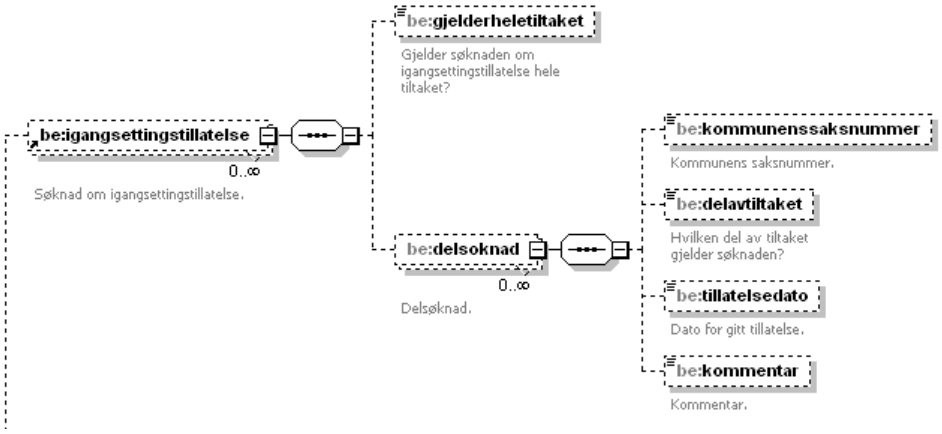


Figure 21 Element structure 'igangsettingstillatelse' within 'soknad' in 'byggesak'

This structure has the following leaf elements:

- "gjelderheletiltaket" of type boolean
- "kommunesaksnummer" of type string
- "delavtiltaket" of type string
- "tilatelsedato" of type date
- "kommentar" of type string

4.3.2.2 midlertidigbrukstillatelse

Another of the sub-element structures of "soknad" is "midlertidigbrukstillatelse" and is described in Figure 22.

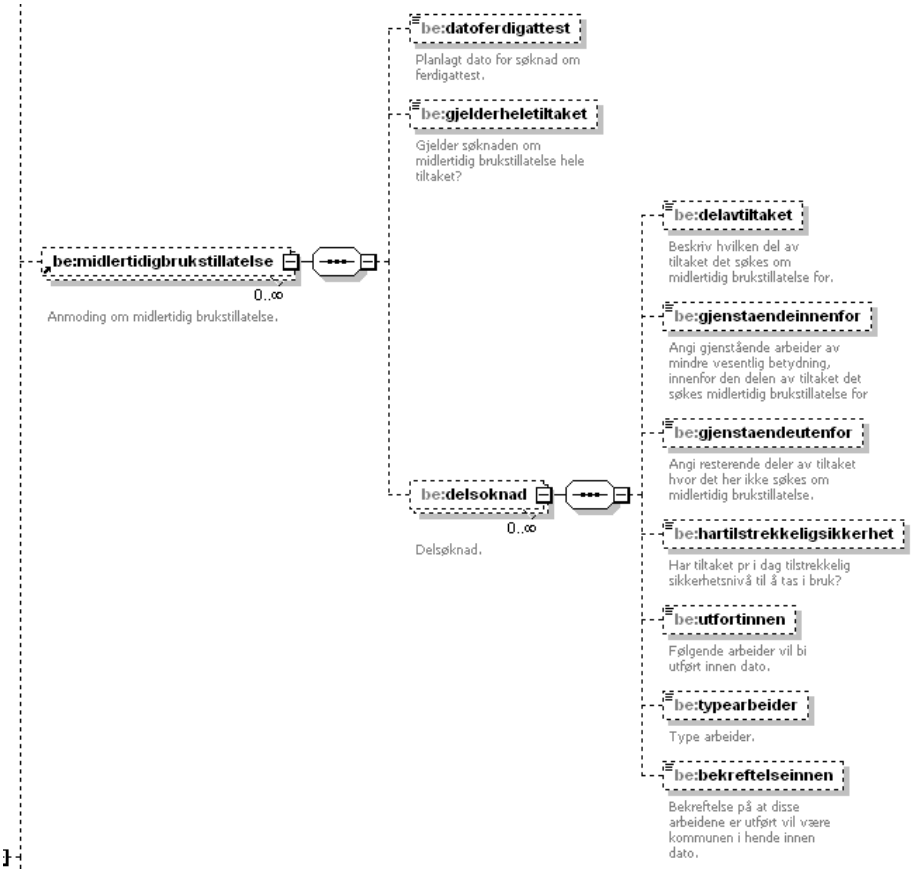


Figure 22 Element structure 'midlertidigbrukstillatelse' under 'sak' in 'byggesak'

The structure has the following leaf elements:

- "datoferdigattest" of type date
- "gjelderheletiltaket" of type boolean
- "delavtiltaket" of type string
- "gjenstaendeinnenfor" of type string
- "gjenstaendeutenfor" of type string
- "hartilstrekkeligsikkerhet" of type string
- "utfortinnen" of type date
- "typearbeider" of type string

- "bekreftelseinnen" of type date

4.3.2.3 ferdigattest

Yet another of the sub structures of "soknad" is called "ferdigattest" and is described in Figure 23.

The structure has the following leaf elements:

- "tilfredstillerkravene" of type boolean
- "gjenstaendearbeider" of type string
- "fristgjenstaendearbeider" of type date
- "bekreftelseinnendato" of type date
- "foretattjusteringer" of type boolean
- "sluttrapportavfalldato" of type date
- "dokumentasjonoverlevert" of type boolean

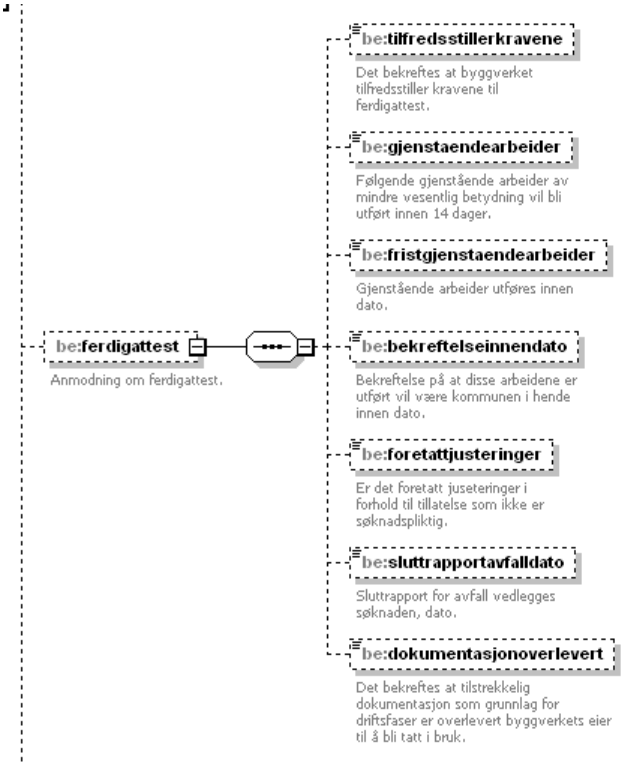


Figure 23 Element structure 'ferdigattest' under 'soknad' in 'byggesak'

4.3.2.4 endringavtillatelse

The last sub structure of "soknad" is called "endringavtillatelse" and is described in Figure 24.

The structure has the following leaf elements:

- "endringansvarsrett" of type boolean
- "endringavansvarligsoker" of type boolean
- "endringdispensasjon" of type boolean
- "endringareal" of type boolean
- "endringplassering" of type boolean
- "endringformal" of type boolean
- "endringbruk" of type boolean
- "endringannet" of type boolean
- "beskrivelse" of type string
- "kommunesaksnummer" of type string

Figure 24 Element structure 'endringavtillatelse' under 'soknad' in 'byggesak'

4.3.3 matrikkelenhet

The nested element structure called "matrikkelenhet" is illustrated in Figure 25.

It consists of two sub structures called

- "enheter" consisting of zero or more instances of elements called "enhet"
    - "enhet" is of the complex type "EiendomType" (see section 7.2.10)
- "endringer", consisting of zero or more instances of elements called "endring"
    - "endring" is of complex type "ParsellType" (see section 7.2.23)

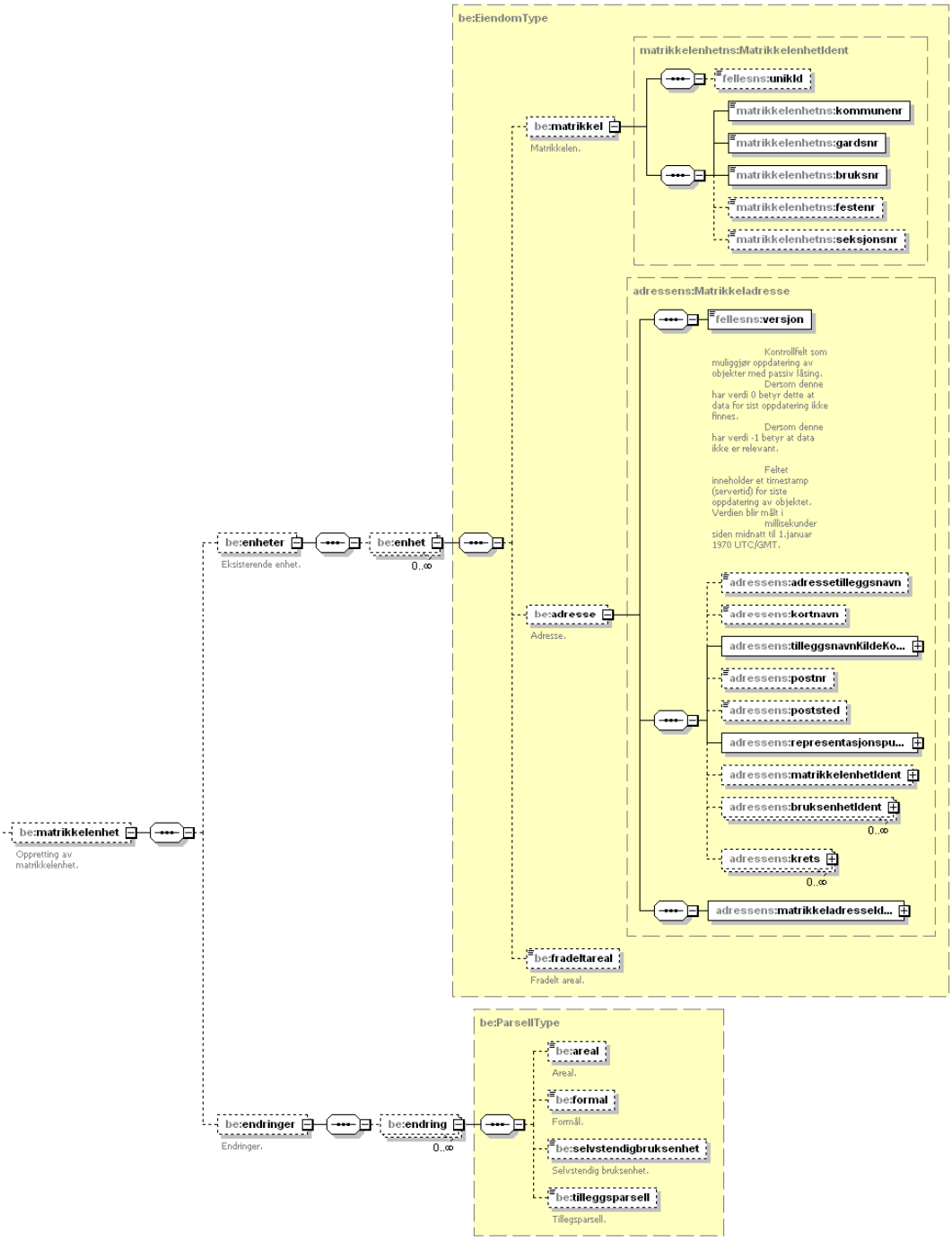


Figure 25 Element structure 'matrikkelenhet' under 'sak' in 'byggesak'

4.3.4 rammebetingelser

The nested element structure called "rammebetingelser" is illustrated in Figure 26.

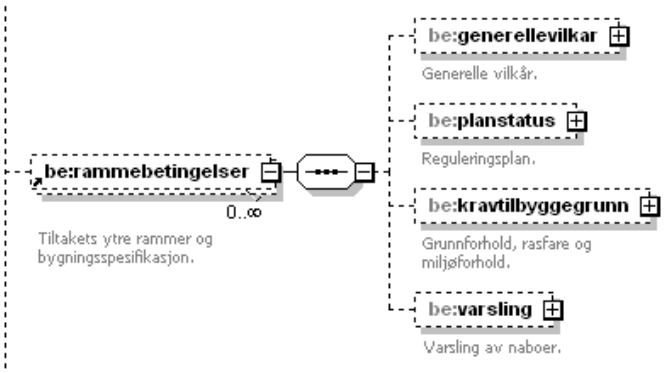


Figure 26 Element structure 'rammebetingelser' under 'sak' in 'byggesak'

The details of the four sub structures will be presented in the following.

4.3.4.1 generellevikar

One of the sub structures of "rammebetingelser" is called "generellevilkar"and it is illustrated in Figure 27.

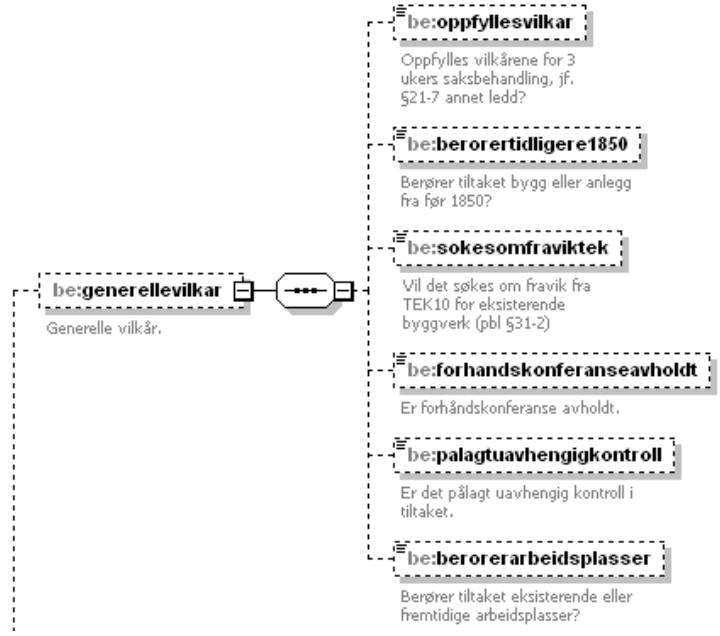


Figure 27 The element structure 'generellevilkar' under 'rammebetingelser' in 'byggesak'

The structure has the following leaf elements:

- "oppfyllervilkar" of type boolean
- "berorertidligere1850" of type boolean
- "sokeromfraviktek" of type boolean

- “forhandskonferanseavholdt” of type boolean
- “palagtuavhengigkontroll” of type boolean
- “berorerarbeidsplasser” of type boolean

4.3.4.2 planstatus

Another of the sub-element structures of “rammebetingelser” is called “planstatus”and it is illustrated in Figure 28.

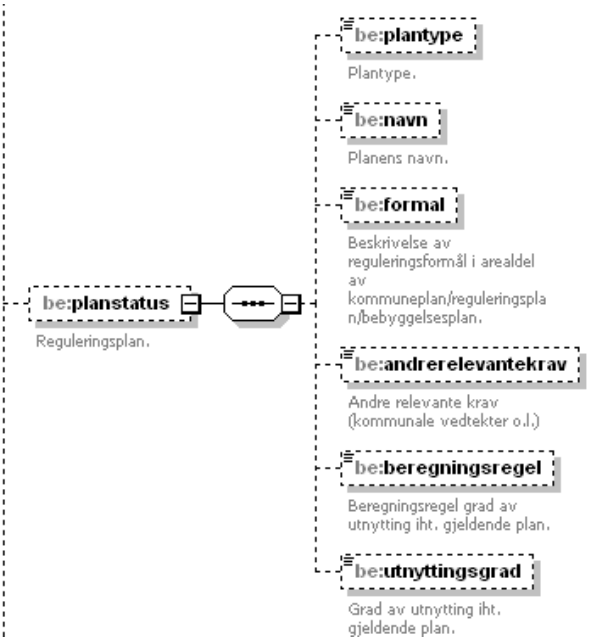


Figure 28 Element structure ’planstatus’ under ’rammebetingelser’ in ’byggesak’

The structure has the following leaf elements:

- “plantype” of simple enumeration type PlantypeType (see in section 7.3.24)
- “navn” of type string
- “formal” of type string
- “andrerelevantekrav” of type string
- “beregningsregel” of simple enumeration type BeregningsregelType (see section 7.3.5)
- “utfyllingsgrad” of type decimal

4.3.4.3 kravtilbyggegrunn

Another of the sub-element structures of “rammebetingelser” is called “kravtilbyggegrunn”and it is illustrated in Figure 29.

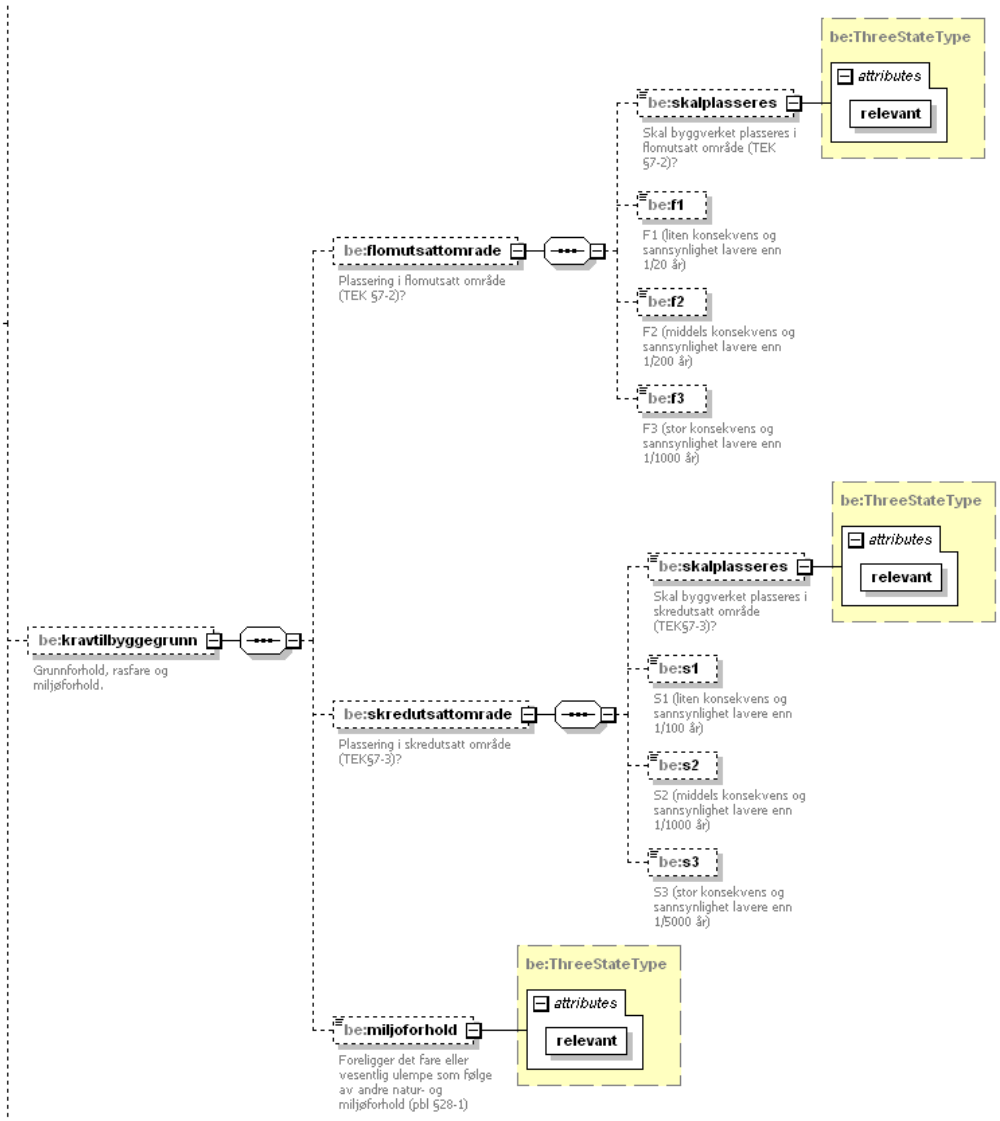


Figure 29 Element structure 'kravtilbyggegrunn' under 'rammebetingelser' in 'byggesak'

The structure has the following leaf elements under "flomutsattomrade":

- "skalplasseres" of complex type ThreeStateType (see section 7.2.30)
- "f1" of type boolean
- "f2" of type boolean
- "f3" of type boolean

The structure has the following leaf elements under "skredutsattomrade":

- "skalplasseres" of complex type ThreeStateType (see section 7.2.30)

- “s1” of type boolean
- “s2” of type boolean
- “s3” of type boolean

And in addition “miljoforhold” is of complex type ThreeStateType, see section 7.2.30.

4.3.4.4 varsling

The last sub structure of “rammebetingelser” is called “varsling”and it is illustrated in Figure 30.

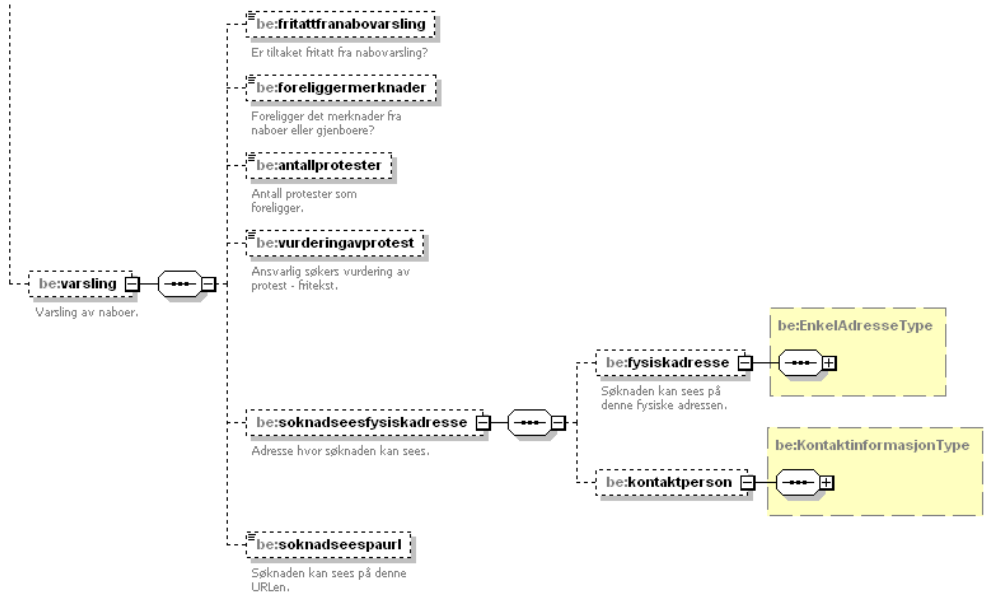


Figure 30 Element structure ’varsling’ under ’rammebetingelser’ in ’byggesak’

The structure has the following leaf elements:

- “fritattnabovarsling” of type boolean
- “foreliggermerknader” of type boolean
- “antallprotester” of type nonNegativeInteger
- “vurderingavprotest” of type string
- “fysiskadresse” of complex type EnkelAdresseType (see section 7.2.13)
- “kontaktperson”, of the complex type KontaktinformasjonType (see section 7.2.18)
- “soknadseespaurl” of type anyURI

4.3.5 beskrivelseavtiltak

The nested element structure called “beskrivelseavtiltak”, directly below “sak”, is illustrated in Figure 31.

The leaf element “folgesbrev” is of type string. The other sub structures are nested and will be presented in the following sub sections.

Figure 31 Element structure ’beskrivelseavtiltak’ under ’sak’ in ’byggesak’

4.3.5.1 formal

One of the sub structures of “beskrivelseavtiltak” is called “formal” (meaning “formål” in Norwegian) and is illustrated in Figure 32.

The structure has the following leaf elements:

- “anleggstypekode”, of simple enumeration type AnleggstypekodeType (see section 7.3.1)
- “bygningstypekode”, of simple enumeration type BygningstypekodeType (see section 7.3.8)
- “neringsgruppekode” of simple enumeration type NeringgruppekodeType (see section 7.3.21)
- “bolig” of type boolean
- “fritidsbolig” of type boolean
- “garasje” of type boolean

- "annet" of type boolean
- "beskrivelse" of type string

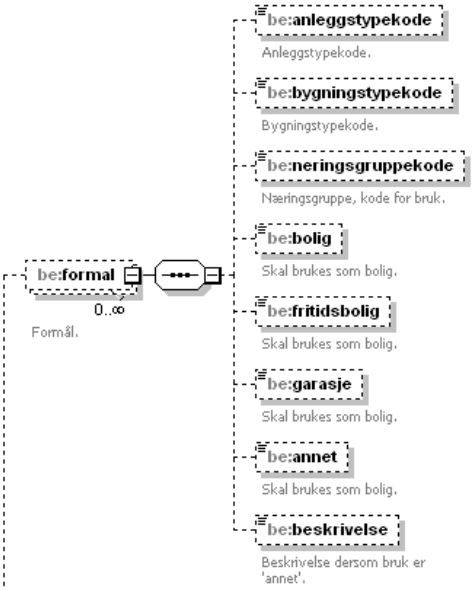


Figure 32 Element structure 'formal' under 'beskrivelseavtiltak' in 'byggesak'

4.3.5.2 bebyggelse

Another of the sub structures of "beskrivelseavtiltak" is called "bebyggelse" and is illustrated in Figure 33.

It consists of three sub structures called:

- "arealdisponering"
- "bygningsopplysninger"
- "lofteinnretninger" (løfteinnretninger)

The following leaf elements exist under "arealdisponering":

- "byggeomrade" of type double
- "arealsomtrekkesfra" of type double
- "arealsomleggestil" of type double
- "beregnettomteareal" of type double
- "beregnetmaksimaltbyggeareal" of type double
- "arealeksisterendebebyggelse" of type double

- "arealnybebyggelse" of type double
- "parkeringsareal" of type double
- "sumareal" of type double
- "beregnetgradavutnytting" of type decimal
- "bebygdarealnybebyggelse" of type double
- "bruksarealnybebyggelse" of type double

The following leaf elements exist under "bygningsopplysninger":

- "arealbya" of complex type ArealfordelingType (see section 7.2.6)
- "arealboligbra" of complex type ArealfordelingType (see section 7.2.6)
- "arealannetbra" of complex type ArealfordelingType (see section 7.2.6)
- "arealialtbra" of complex type ArealfordelingType (see section 7.2.6)
- "bruksenheterboligformal" of complex type EnheterfordelingType (see section 7.2.12)
- "bruksenheterannetformal" of complex type EnheterfordelingType (see section 7.2.12)
- "bruksenheterialt" of complex type EnheterfordelingType (see section 7.2.12)
- "antalletasjer" of type nonNegativeInteger

The following leaf elements exist under "lofteinnretninger":

- "erheisibygning" of complex type ThreeStateType (see section 7.2.30)
- "planlegges" of complex type ThreeStateType (see section 7.2.30)
- "heiser" of type boolean
- "trappeheisellerlofteplattform" of type boolean
- "rulletrappellerrullendefortau" of type boolean

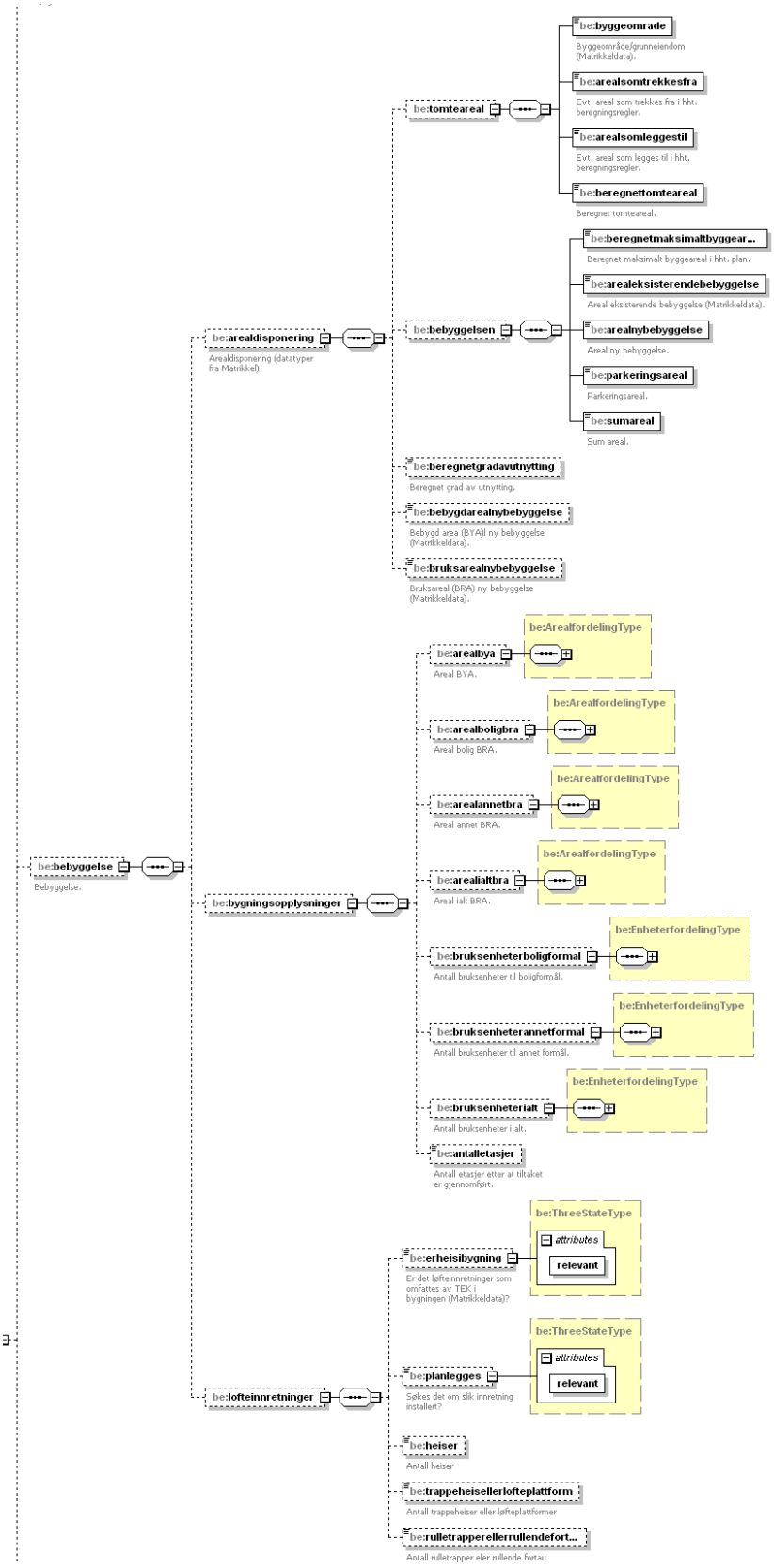


Figure 33 Element structure ’bebyggelse’ under ’beskrivelseavtiltak’ in ’byggesak’

4.3.5.3 plassering

Another of the sub-element structures of "beskrivelseavtiltak" is called "plassering" and it is illustrated in Figure 34.

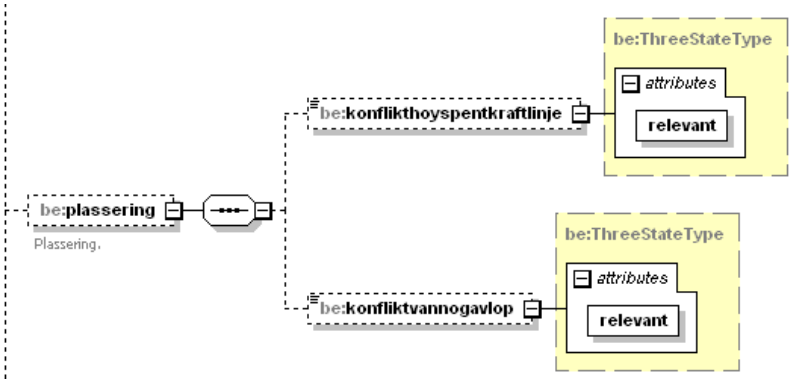


Figure 34 Element structure 'plassering' under 'beskrivelseavtiltak' in 'byggesak'

The following leaf elements exist here:

- "konflikthoyspentkraftlinje" of complex type ThreeStateType (see section 7.2.30)
- "konfliktvannogavlop" of complex type ThreeStateType (see section 7.2.30)

4.3.5.4 infrastruktur

Another of the sub structures of "beskrivelseavtiltak" is called "infrastruktur" and it is illustrated in Figure 35.

It consists of three sub structures called:

- "adkomst"
- "vannforsyning"
- "avlop"

The following leaf elements exist under "adkomst":

- "endretadkomst" of type boolean
- "vegtype" of simple enumeration type VegtypeType (see section 7.3.37)
- "ertillatelsegitt" of type boolean

The following leaf elements exist under "vannforsyning":

- "vannforsyningskode" of complex type VannforsyningsKode, from the "bygningns" namespace (Matrikkelen)
- "krysserannensgrunn" of complex type ThreeStateType (see section 7.2.30)

- "tillatelseforkrysning" of type boolean

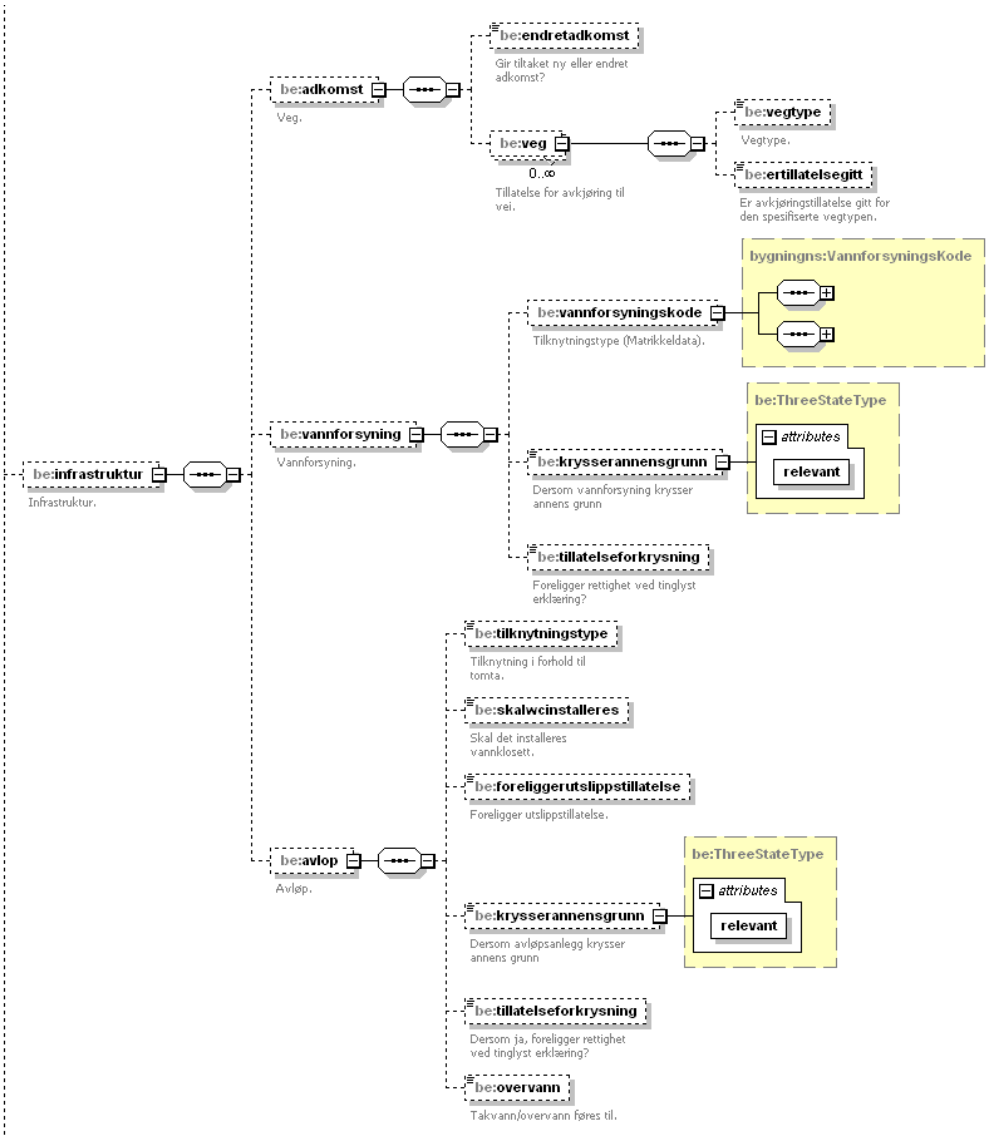


Figure 35 Element structure 'infrastructure' under 'beskrivelseavtiltak' in 'byggesak'

The following leaf elements exist under "avlop":

- "tilknytningstype" of simple enumeration type AvloptilknytningstypeType (see section 7.3.4
- "skalwcinstalleres" of type boolean
- "foreliggerutslippstillatelse" of type boolean
- "krysserannensgrunn" of complex type ThreeStateType (see section 7.2.30)
- "tillatelseforkrysning" of type boolean

- "overvann" of simple enumeration type OvervannType (see section 7.3.22)

4.3.5.5 boligspesifikasjon

Another of the sub structures of "beskrivelseavtiltak" is called "boligspesifikasjon" and is illustrated in Figure 36.

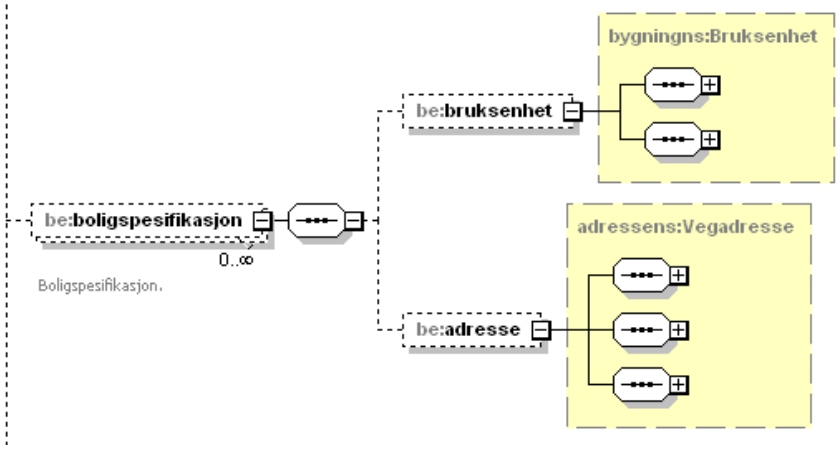


Figure 36 Element structure 'boligspesifikasjon' under 'beskrivelseavtiltak' in 'byggesak'

The following elements are leaf elements:

- "bruksenhet" of complex type VannforsyningsKode, from the "bygningns" namespace (Matrikkelen)
- "adresse" of complex type VannforsyningsKode, from the "adressens" namespace (Matrikkelen)

4.3.5.6 energiforsyning

The last of the sub structures of "beskrivelseavtiltak" is called "energiforsyning" and it is illustrated in Figure 37.

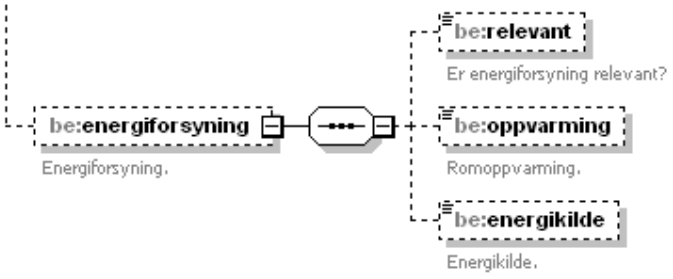


Figure 37 Element structure 'energiforsyning' under 'beskrivelseavtiltak' in 'byggesak'

The structure has the following leaf elements:

- "relevant" of type boolean
- "oppvarming" of simple enumeration type RomoppvarmingType (see section 7.3.28)

- "energikilde" of simple enumeration type EnergikildeType (see section 7.3.11)

4.3.6 dispensasjon

The nested element structure called "dispensasjon" directly below "sak" is illustrated in Figure 38.

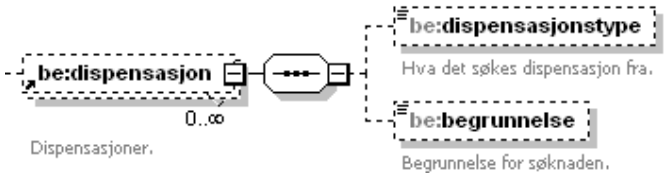


Figure 38 Element structure 'dispensasjon' under 'sak' in 'byggesak'

The structure has the following leaf elements:

- "dispensasjonstype" of simple enumeration type DispensasjonsType (see section 7.3.10)

- "begrunnelse" of type string

4.3.7 eiendom

The nested element structure called "eiendom" directly below "sak" is illustrated in Figure 39.

There are two attributes. One called "id" of type "ID" and one called "type" being an enumeration over the two values: "byggeeiendom" and "naboeiendom".

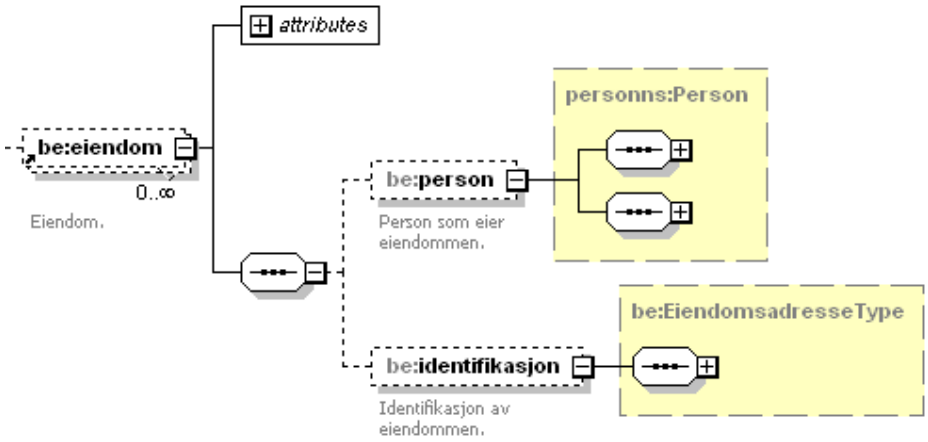


Figure 39 Element structure 'eiendom' under 'sak' in 'byggesak'

The structure has the following leaf elements:

- "bruksenhet" of complex type "Person", from the "personns" namespace (Matrikkelen)

- "identifikasjon" of complex type EiendomsadresseType (see section 7.2.11)

4.3.8 part

The element structure called “part” directly below “sak” is illustrated in Figure 40.

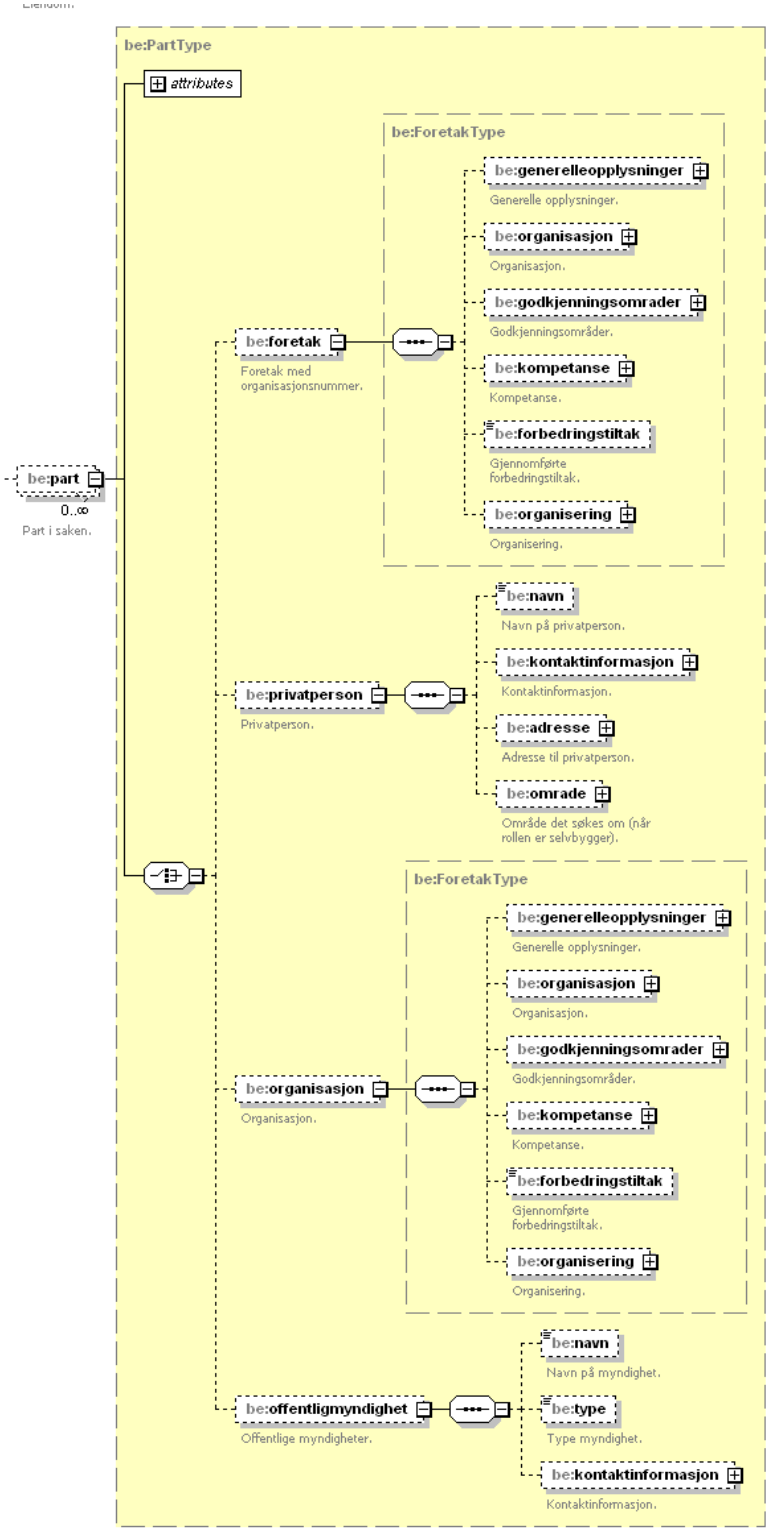


Figure 40 Element structure ’part’ under ’sak’ in ’byggesak’

The structure consists of one leaf element:

- "part" of complex type PartType (see section 7.2.25)

4.3.9 rolle

The nested element structure called "rolle" directly below "sak" is illustrated in Figure 41.

There is one attribute called "id" of type "ID".

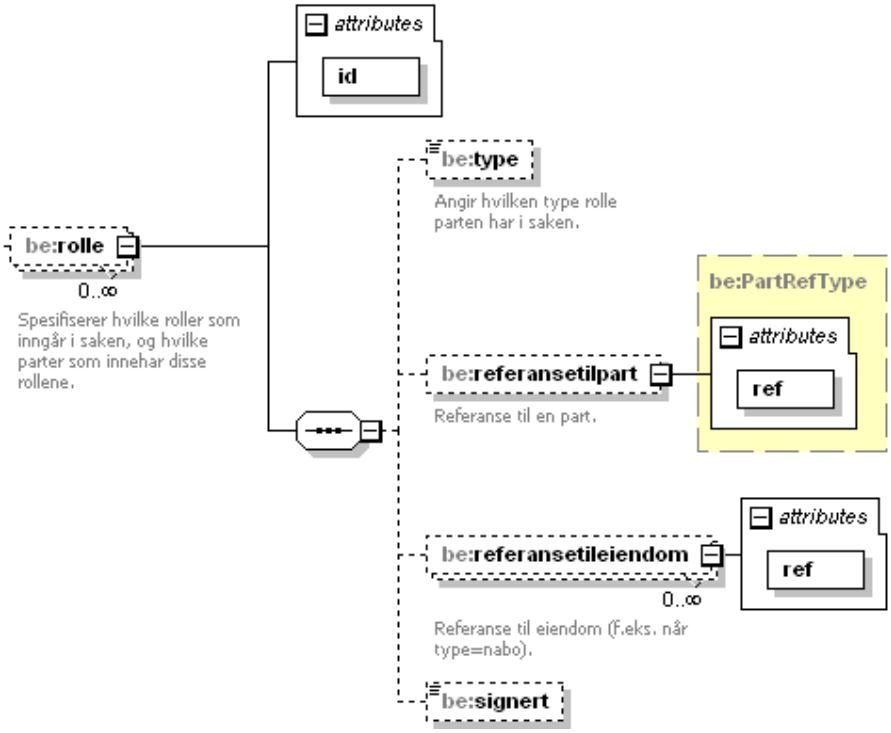


Figure 41 Element structure 'rolle' under 'sak' in 'byggesak'

The structure has the following leaf elements:

- "type" of simple enumeration type PartRolleType (see section 7.3.10)
- "referansetilpart" of complex type PartRefType (see section 7.2.24)
- "referansetileiendom" of the predefined type IDREF
- "signert" of type boolean

4.3.10 ansvarsomradebeskrivelser

The nested element structure called "ansvarsomradebeskrivelser" directly below "sak" is illustrated in Figure 42

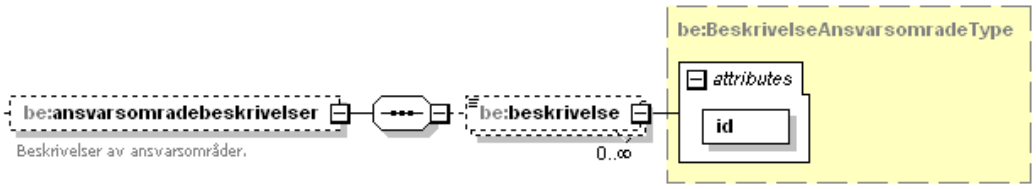


Figure 42 Element structure 'ansvarsomradebeskrivelser' under 'sak' in 'byggesak'

The structure consists of one leaf element:

- "part" of complex type BeskrivelseAnsvarsomradeType (see section 7.2.8)

4.3.11 gjennomforingsplan

The nested element structure called "dispensasjon" directly below "sak" is illustrated in Figure 43.

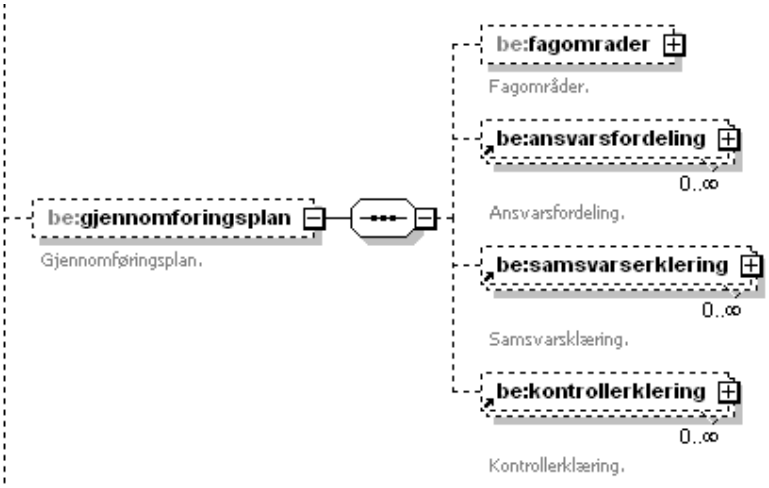


Figure 43 Element structure 'gjennomforingsplan' under 'sak' in 'byggesak'

It consists of the following substructures:

- "fagomrader"
- "ansvarsfordeling"
- "samsvarserklering"
- "kontrollerklering"

They will all be presented in detail below.

4.3.11.1 fagomrader

One of the sub structures of "gjennomforingsplan" is called "fagomrader" and is illustrated in Figure 44.

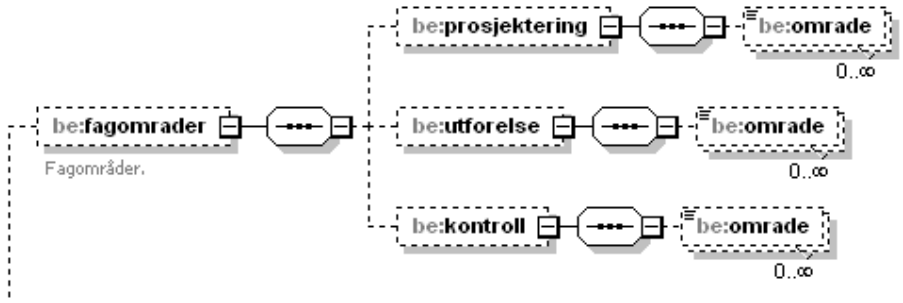


Figure 44 Element structure 'fagomrader' under 'gjennomforingsplan' in 'byggesak'

It consists of three elements called "prosjektering", "utforelse", and "kontroll". Each having a sequence of zero or more leaf element called "omrade" of type string.

4.3.11.2 ansvarsfordeling

Another of the sub structures of "gjennomforingsplan" is called "ansvarsfordeling" and is illustrated in Figure 45

The following sub structures exist within "ansvarsfordeling":

- "ansvarligsoker" of complex type AnsvarligSokerType (see section 7.2.5)
- "ansvarligprosjektering" of complex type AnsvarligProsjekteringType (see section 7.2.3)
- "ansvarligutforelse" of complex type AnsvarligUtforelseType (see section 7.2.4)
- "ansvarligkontrollprosjektering" of complex type AnsvarligKontrollType (see section 7.2.2), extended with
    - "kontrollerkleringrammetillatelse" of type boolean
    - "kontrollerkleringigangsettingstillatelse" of type boolean
    - "kontrollerkleringferdigattest" of type boolean
- "ansvarligkontrollutforelse" of complex type AnsvarligKontrollType (see section 7.2.2)

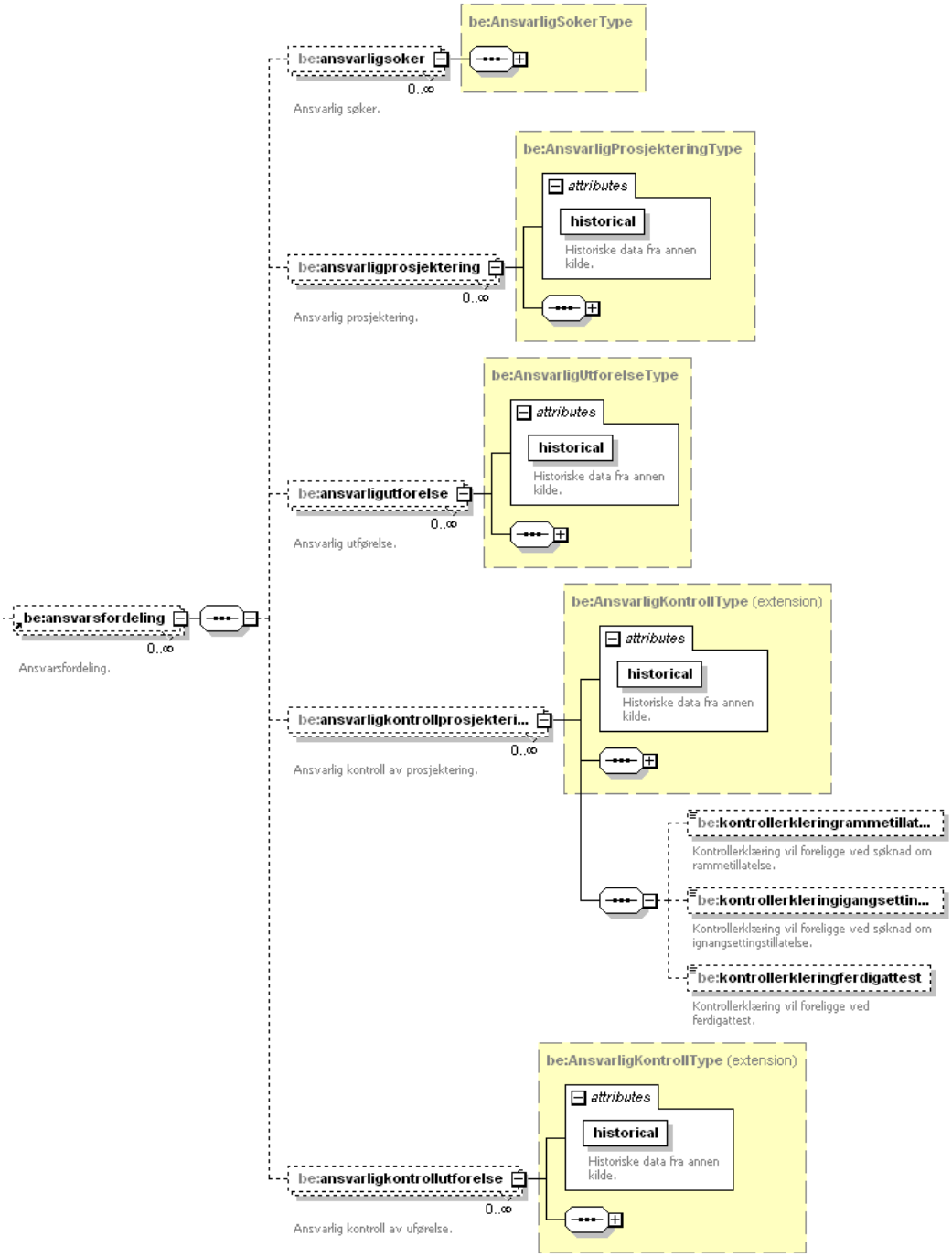


Figure 45 Element structure 'ansvarsfordeling' under 'gjennomforingsplan' in 'byggesak'

4.3.11.3 samsvarserklering

Another of the sub structures of "gjennomforingsplan" is called "samsvarserklering" and is illustrated in Figure 46. The following sub structures exist within "samsvarserklering":

- "prosjektering" of complex type SamsvarserkleringType (see section 7.2.29), extended with

- “fagomrade” of type string
- “prosjekteringverifisert” of type boolean
- “grunnlagverifisert” of type boolean
- “ikkeavdekketgjenstaende” of type boolean

- “utforelse” also of complex type SamsvarserkleringType (see section 7.2.29), extended with
  - “fagomrade” of type string
  - “utforelseverifisert” of type boolean
  - “ingenmanglerbrukstillatelse” of type boolean
  - “gjenstaendearbeider” of type string
  - “resterendedeler” of type string
  - “ingenmanglerferdigattest” of type boolean

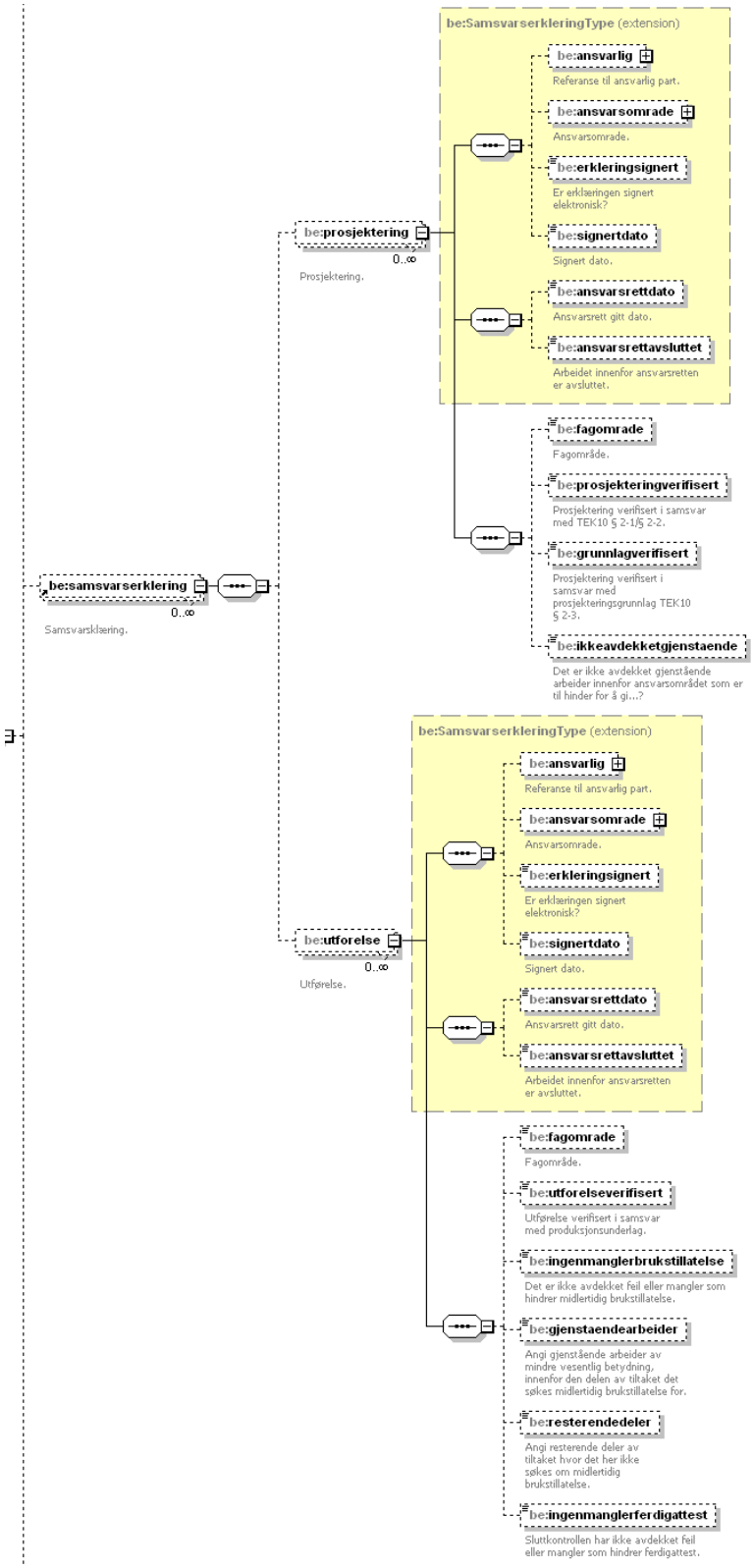


Figure 46 Element structure ’samsvarserklering’ under ’gjennomforingsplan’ in ’byggesak’

4.3.11.4 kontrollerklering

The last sub structures of "gjennomforingsplan" is called "kontrollerklering" and is illustrated in Figure 47.

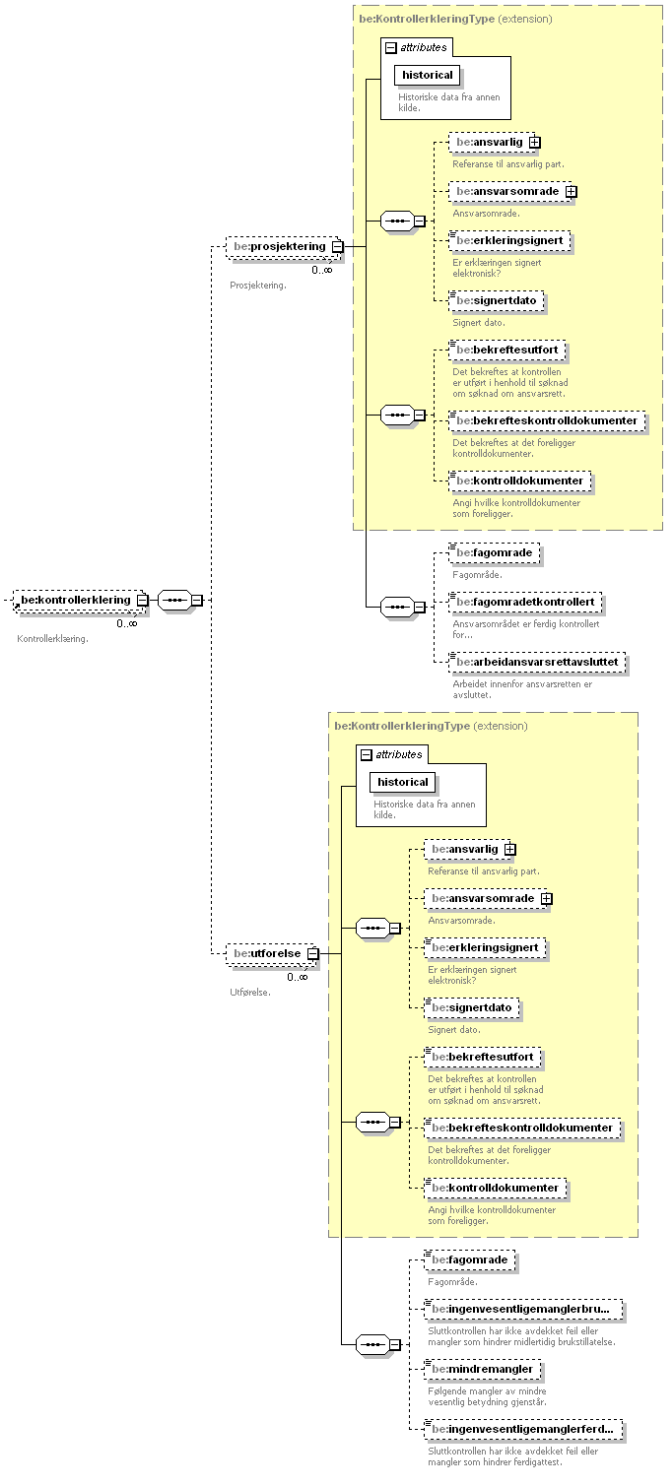


Figure 47 Eement structure 'kontrollerklering' under 'gjennomforingsplan' in 'byggesak'

The following sub structures exist within “kontrollerklering”:

- “prosjektering” of complex type KontrollerkleringType (see section 7.2.19), extended with
    - “fagomrade” of type string
    - “fagomradekontrollert” of type boolean
    - “arbeidansvarsrettavsluttet” of type boolean
- “utforelse” also of complex type KontrollerkleringType (see section 7.2.19), extended with
    - “fagomrade” of type string
    - “ingenvesentligemanglerbrukstillatelse” of type boolean
    - “mindremangler” of type string
    - “ingenvesentligemanglerferdigattest” of type boolean

4.3.12 bygning

The nested element structure called “dispensasjon” directly below “sak” is illustrated in Figure 48.

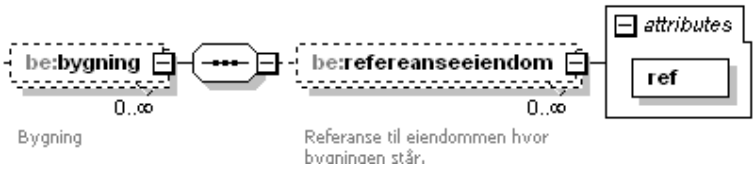


Figure 48 Element structure ’bygning’ under ‘sak’ in ‘byggesak’

The leaf is an attribute of the predefined type IDREF.

4.3.13 andremyndigheter

The nested element structure called “dispensasjon” directly below “sak” is illustrated in Figure 49.

One element structure is at present within “andremyndigheter” and that is “arbeidstilsynet” which contains the following leaf nodes:

- “antalleksisterende” (arbeidsplasser) of type nonNegativeInteger
- “antallfremtidige” of type nonNegativeInteger
- “antallfaste” of type nonNegativeInteger
- “antallmidlertidige” of type nonNegativeInteger

- "antalltotalt" of type nonNegativeInteger
- "utleiebygg" of type boolean
- "beskrivelse" of type string

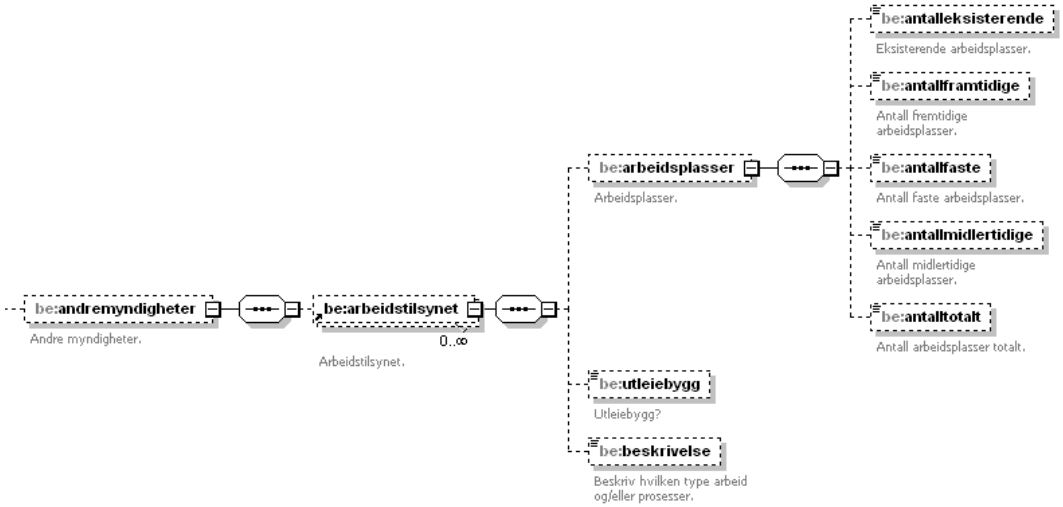


Figure 49 Element structure 'andremyndigheter' under 'sak' in 'byggesak'

4.3.14 vedlegg

The element structure called "vedlegg" directly below "sak" is illustrated in Figure 50.

The element "vedlegg" is of complex type "VedleggType" desctibed in 7.2.34.

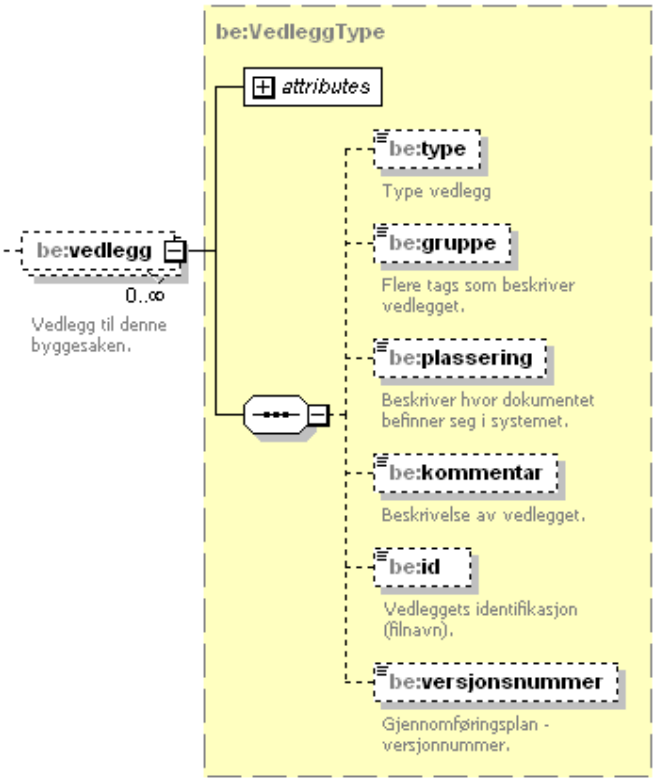


Figure 50 Element structure 'vedlegg' under 'sak' in 'byggesak'

4.4 saksbehandling

The nested element structure called "saksbehandling" is illustrated in Figure 51.

It consists of an attribute called "id" and an element structure called "matrikkelenhet" consisting of the following leaf elements:

- "rekvisisjon" of type boolean
- "utsettelse" of type boolean
- "soknadmatrikulering" of type boolean
- "onsketdato" of type date
- "kommentar" of type string

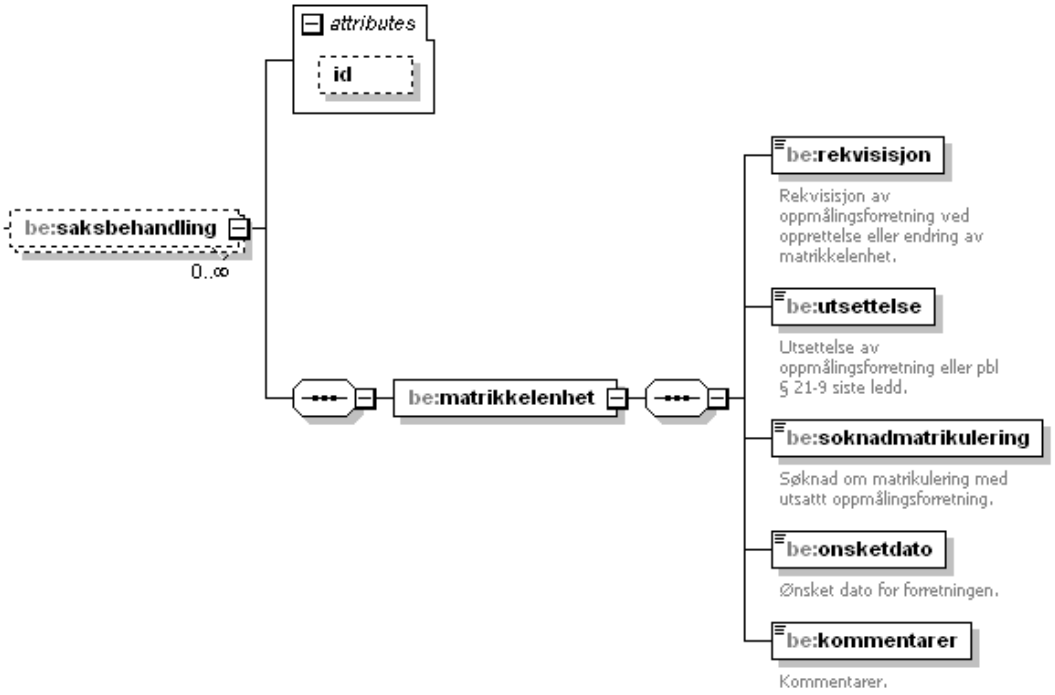


Figure 51 Element structure 'saksbehandling' under 'byggesak'

4.5 arkiv

The element "arkiv" within "byggesak" is empty.

5 Systemadministrasjon (sgikt.xsd)

5.1 Namespaces

The file heading is shown below, giving an overview of the namespaces used:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" targetNamespace="
http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified" attributeFormDefault="unqualified" version="2.0">
    <xs:include schemaLocation="common.xsd"/>
```

5.2 systemadministrasjon (element)

In addition to the XML Schemas for "Byggsøk" or "Sentral godkjenning", another XML Schema can be found in the file *sgikt.xsd*. This Schema is related to system administrative tasks

The root element "systemadministrasjon", illustrated in Figure 52, contains two substructures: "brukere" and "endrenedtrekkslister".

The sub structure called "brukere" contains the following leaf elements:

- "unikid" of simple pattern type StringWithoutBlanksType (see section 7.4.8

- “opprettetdato” of the the predefined date type
- “etternavn” of type string
- “mellomnavn” of type string
- “fornavn” of type string
- “brukernavn” of simple pattern type StringWithoutBlanksType (see section 7.4.8
- “passord” of type string
- “tilhorer”
- “rolle” of simple enumeration type SaksbehandlerRolleType (see section 7.3.27
- “andrefunksjoner” of simple enumeration type SaksbehandlerFunksjonType (see section 7.3.26
- “stillingsprosent” of simple enumeration type StillingsprosentType (see section 7.4.7
- “ansettelsesforhold” of simple enumeration type SaksbehandlerAnsettelsesforholdType (see section 7.3.25
- “permisjontildato” of the the predefined date type
- “sluttetdato” of the the predefined date type
- “sakstype” of simple enumeration type SakstypeType (see section 7.3.29
- “epostokonomiansvarlig” of simple pattern type EmailAddressType (see section 7.4.2

The sub structure called “endrenedtrekkslister” contains the following leaf elements:

- “administrativenhet” of type string
- “opprettetdato” of the the predefined date type
- “nedlagtdato” of the the predefined date type

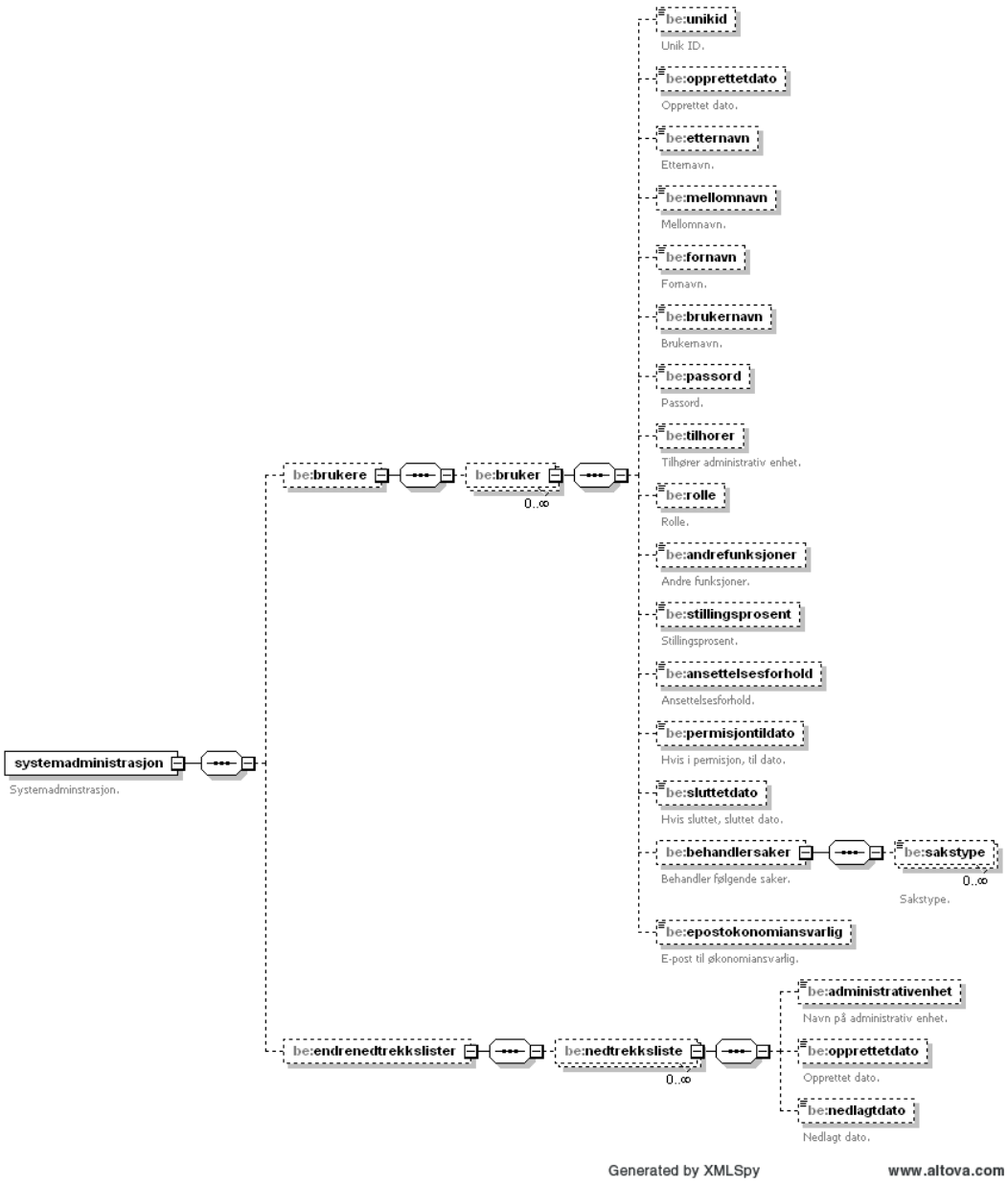


Figure 52 The element structure ‘systemadministrasjon’

6 Faktura (faktura.xsd)

6.1 Namespaces

The file heading is shown below, giving an overview of the namespaces used:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Thor Kristoffersen (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" targetNamespace="
http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="qualified" attributeFormDefault="unqualified" version="2.0">
   <xs:include schemaLocation="common.xsd"/>
```

6.2 faktura (element)

This XML Schema in faktura.xsd is defined to support the interaction with a sepsific economy system. It is related to handling of invoices and reports.

The element structure called "faktura" is illustrated in Figure 53. The sub structures will be (see the following.

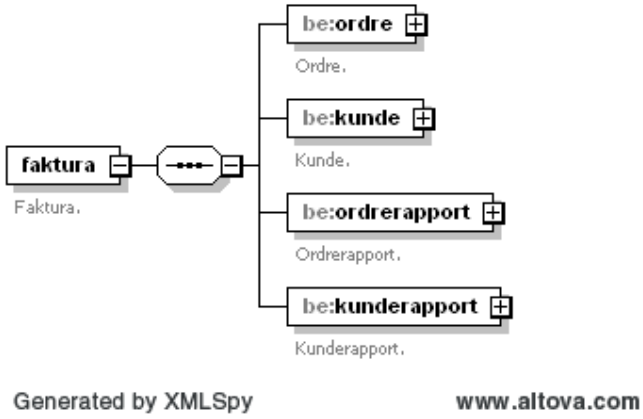


Figure 53 Element structure for 'faktura'

6.2.1 ordre

This element structure is illustrated in Figure 54. It consists of the following leaf elements:

- "accept_flag" of simple pattern type NumericBinaryType (see section 6.5.3)
- "allocation_key" of simple pattern type NumericDecimalType (see section 6.5.4)
- "amount_set" of " of simple pattern type NumericBinaryType (see section 6.5.3)
- "apar_id" of "allocation_key" of simple pattern type NumericDecimalType (see section 6.5.4)
- "article" of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- "batch_id" of simple pattern type AlphaNumericMixedType (see section 6.5.1)
- "currency" of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- "disc_percent" of simple pattern type NumericDecimalType (see section 6.5.4)
- "exch_rate" of simple pattern type NumericDecimalType (see section 6.5.4)
- "ext_ord_ref" of simple pattern type AlphaNumericMixedType (see section 6.5.1)
- "line_no" of simple pattern type NumericDecimalType (see section 6.5.4)
- "order_id" of simple pattern type NumericDecimalType (see section 6.5.4)

- “order_type” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “responsible” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “responsible2” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “sequence_no” of simple pattern type NumericDecimalType (see section 6.5.4)
- “trans_type” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “value_1” of simple pattern type NumericDecimalType (see section 6.5.4)
- “voucher_type” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)

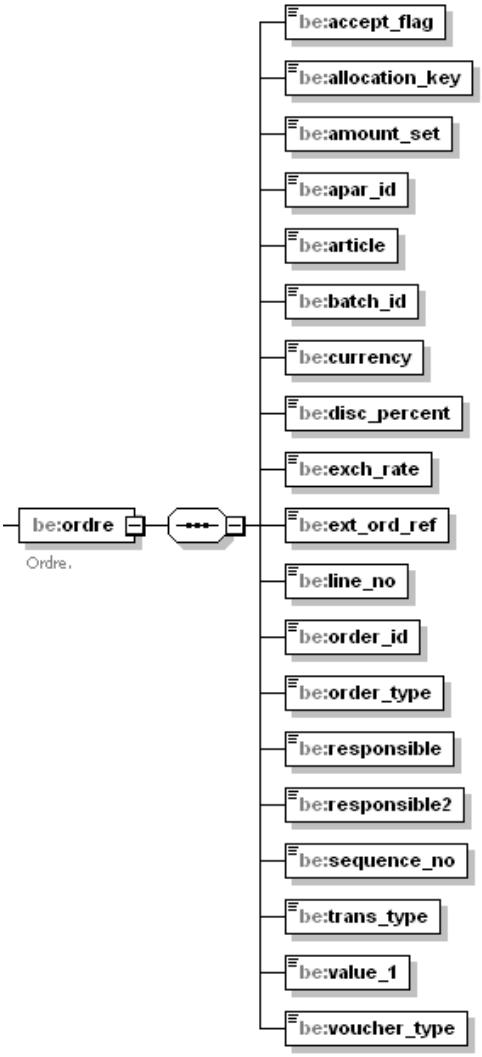


Figure 54 Element structure ‘ordre’ within ‘faktura’

6.2.2 kunde

This element structure is illustrated in Figure 55.

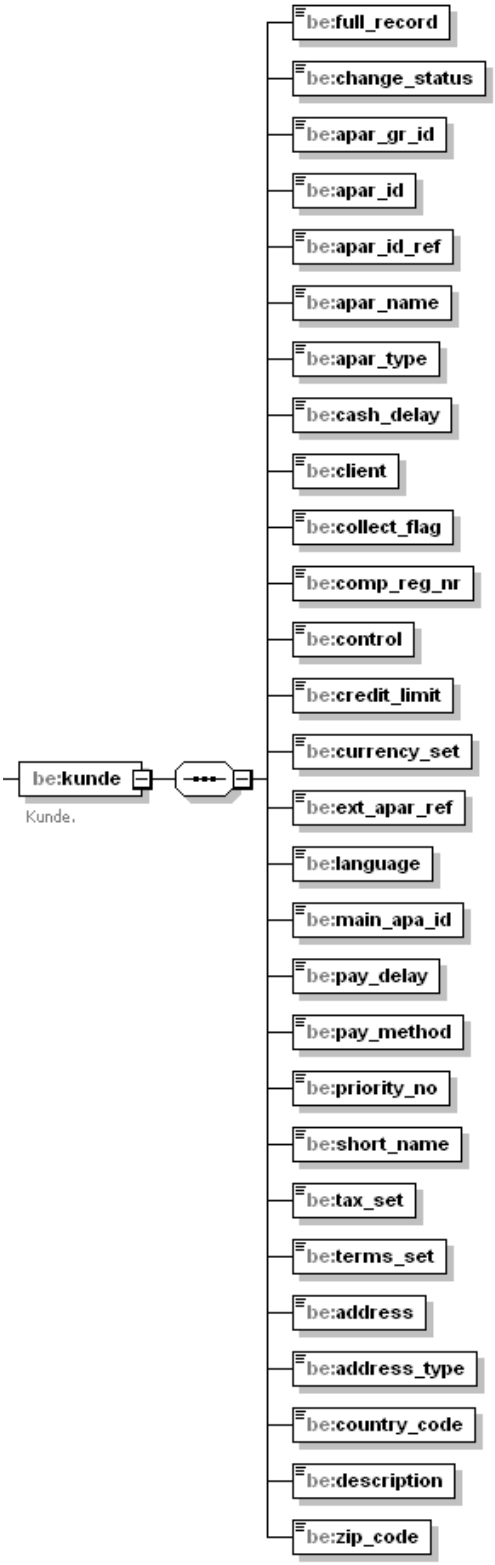


Figure 55 Element structure 'kunde' within 'faktura'

It consists of the following leaf elements:

- “full_record” of simple pattern type NumericDecimalType (see section 6.5.4)
- “change_status” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “apar_gr_id” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “apar_id” of simple pattern type NumericDecimalType (see section 6.5.4)
- “apar_id_ref” of simple pattern type NumericDecimalType (see section 6.5.4)
- “apar_name” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “apar_type” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “cash_delay” of simple pattern type NumericDecimalType (see section 6.5.4)
- “client” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “collect_flag” of simple pattern type NumericBinaryType (see section 6.5.3)
- “comp_reg_nr” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “control” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “credit_limit” of simple pattern type NumericMoneyType (see section 6.5.3)
- “currency_set” of simple pattern type NumericBinaryType (see section 6.5.3)
- “ext_apar_ref” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “language” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “main_apa_id” of simple pattern type NumericDecimalType (see section 6.5.4
- “pay_delay” of simple pattern type NumericDecimalType (see section 6.5.4)
- “pay_method” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “priority_no” of simple pattern type NumericDecimalType (see section 6.5.4)
- “short_name” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “tax_set” of simple pattern type NumericBinaryType (see section 6.5.3)
- “terms_set” of simple pattern type NumericBinaryType (see section 6.5.3)
- “address” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)

- “address_type” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “country_code” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “description” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)
- “zip_code” of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)

6.2.3 ordrerapport

This element structure is illustrated inFigure 56

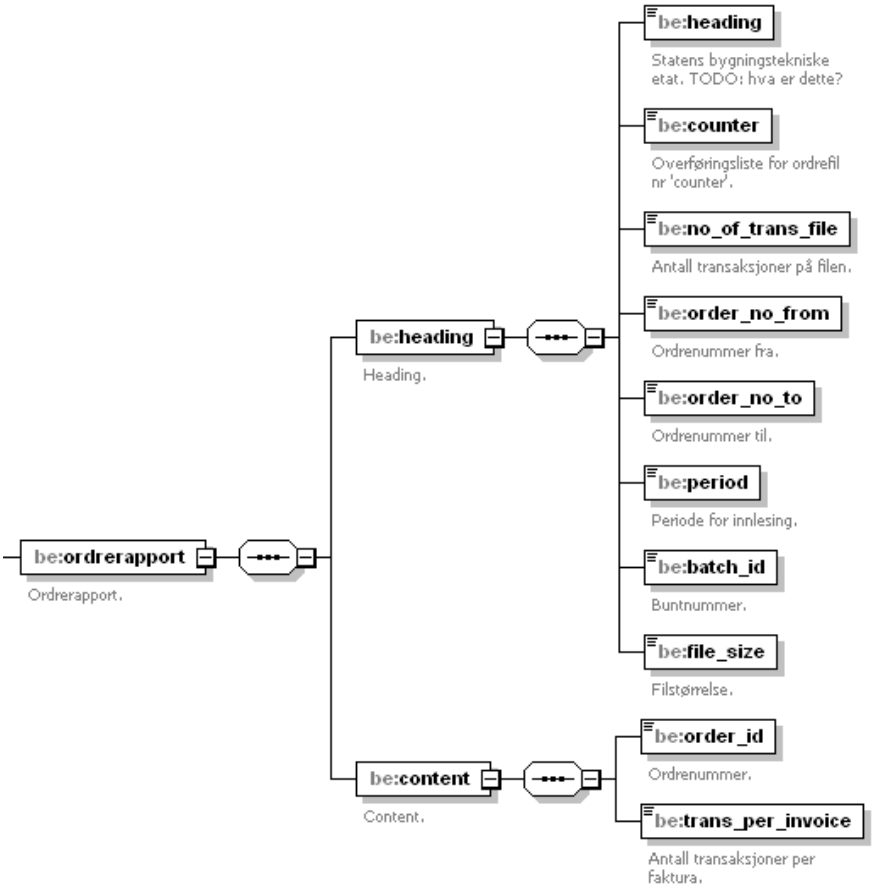


Figure 56 Element structure ’ordrerapport’ within ’faktura’

It consists of the following leaf elements:

- “heading”of type string
- “counter” of type string
- “no_of_trans_file” of type string
- “order_no_from” of type string

- "order_no_to" of type string
- "period" of type string
- "batch_id" of type string
- "file_size" of type string
- "order_id" of simple pattern type NumericDecimalType (see section 6.5.4
- "trans_per_invoice" of type string

6.2.4 kunderapport

This element structure is illustrated in Figure 57.

It consists of the following leaf elements:

- "heading"of type string
- "counter" of type string
- "printed_date" of type string with the following restriction:
    - [0-9]{2}\.[0-9]{2}\.[0-9]{4}
- "no_enterprises" of type string
- "file_size" of type string
- "apar_id_ref" of simple pattern type NumericDecimalType (see section 6.5.4)
- "apar_name" of simple pattern type AlphaNumericMixedType (see section 6.5.1)
- "address" of of simple pattern type AlphaNumericMixedType (see section 6.5.1)
- "zip_code" of simple pattern type AlphaNumericMixedType (see section 6.5.1)
- "change_status" of simple pattern type AlphaNumericUppercaseType (see section 6.5.2)

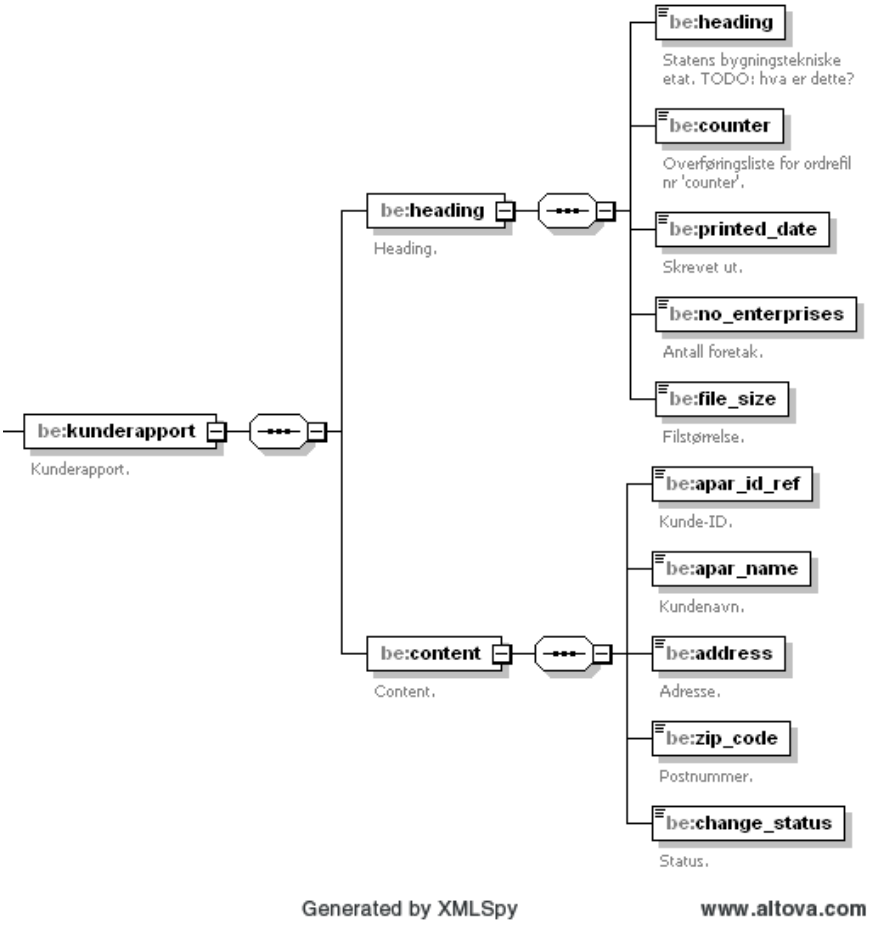


Figure 57 Element structure 'kunderapport' within 'faktura'

6.3 InfoOmForetakType (ComplexType)

The structure of the complex type ″InfoOmForetakType″ is illustrated in Figure 58.

The leaf element nodes are the following:

- ″antallforetakfunnet″ of type nonNegativeInteger
- ″organisasjonsnummer″ of simple pattern type OrganisasjonsnummerType (see section 7.4.4)
- ″navn″ of type string
- ″postadresse″ of complex type EnkelAdresseType (see section 7.2.13)
- ″godkjenttil″ of type date

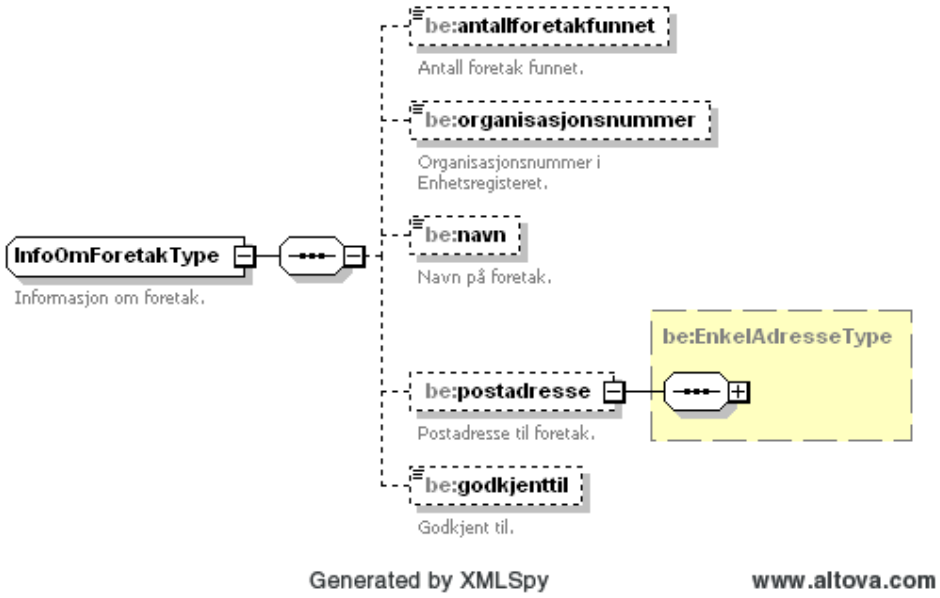


Figure 58 Complex type InfoOmForetakType

6.4 rapporter (ComplexType)

The structure of the complex type "rapporter" is illustrated in Figure 59.

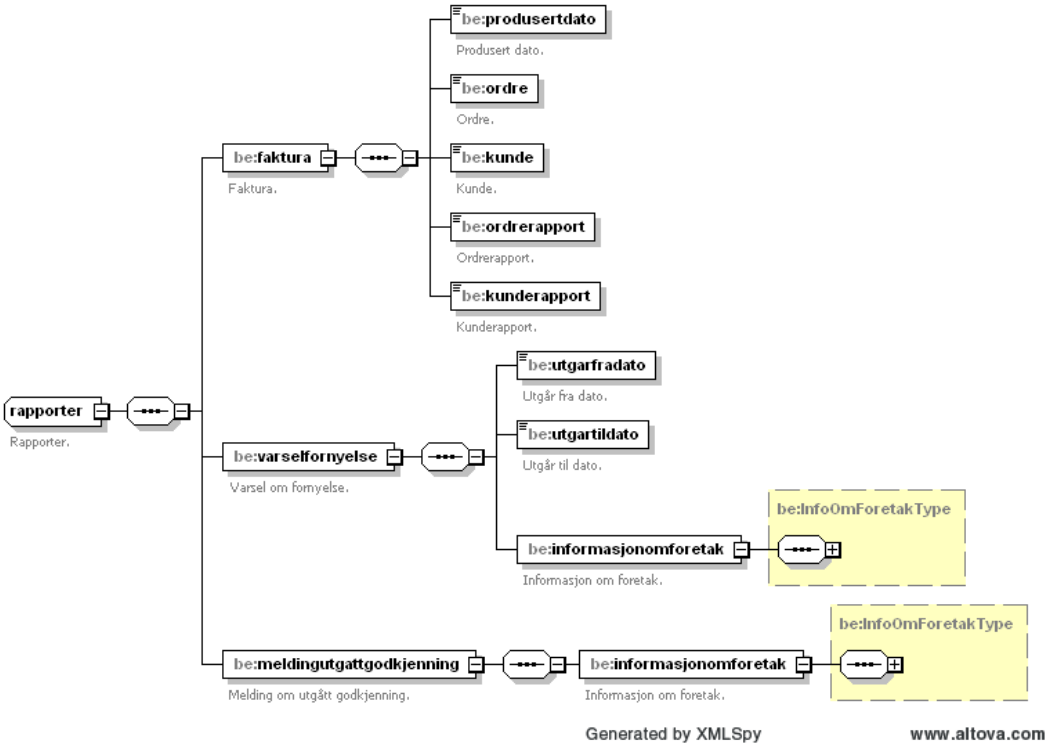


Figure 59 Complex type rapporter

It consists of three substructures:

- “faktura”
- “varselfornyelse”
- “meldingutgattgodkjenning”

The leaf elements under “faktura” are the following:

- “produsertdato” of type date
- “ordre” of type anyURI
- “kunde” of type anyURI
- “ordrerapport” of type anyURI
- “kunderapport” of type anyURI

The leaf elements under “varselfornyelse” are the following:

- “utgarfradato” of type date
- “utgartildato” of type date
- “informasjonomforetak” of the type InfoOmForetakType (see section 6.3)

The leaf elements under “meldingutgattgodkjenning” are the following:

- “informasjonomforetak” of the type InfoOmForetakType (see section 6.3)

6.5 Simple types

A set of simple pattern types have been defined. These simple types are presented in the following.

6.5.1 AlphanumMixedType

The type AlphanumMixedType provides the following pattern: “Alfanumerisk, både store og små bokstaver, med påfølgende blanke”. The XML schema code is defined as follows:

```
<xs:simpleType name="AlphanumMixedType">
  <xs:annotation>
    <xs:documentation>Alfanumerisk, både store og små bokstaver, med påfølgende blanke.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[\p{L}\p{Nd}]* *"/>
  </xs:restriction>
</xs:simpleType>
```

6.5.2 AlphanumUppercaseType

The type AlphanumUppercaseType provides the following pattern: “Alfanumerisk, kun store bokstaver, med påfølgende blanke”. The XML schema code is defined as follows:

```
<xs:simpleType name="AlphanumUppercaseType">
  <xs:annotation>
    <xs:documentation>Alfanumerisk, kun store bokstaver, med påfølgende blanke.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[\p{Lu}\p{Nd}]* *"/>
  </xs:restriction>
</xs:simpleType>
```

6.5.3 NumericBinaryType

The type NumericBinaryType provides the following pattern: “Numerisk, binær, med ledende blanke”. The XML schema code is defined as follows:

```
<xs:simpleType name="NumericBinaryType">
  <xs:annotation>
    <xs:documentation>Numerisk, binær, med ledende blanke.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value=" *[01]*"/>
  </xs:restriction>
</xs:simpleType>
```

6.5.4 NumericDecimalType

The type NumericDecimalType provides the following pattern: “Numerisk, desimal, med ledende blanke”. The XML schema code is defined as follows:

```
<xs:simpleType name="NumericDecimalType">
  <xs:annotation>
    <xs:documentation>Numerisk, desimal, med ledende blanke.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value=" *[0-9]*"/>
  </xs:restriction>
</xs:simpleType>
```

6.5.5 NumericMoneyType

The type NumericMoneyType provides the following pattern: “Numerisk, to faste desimaler”. The XML schema code is defined as follows:

```
<xs:simpleType name="NumericMoneyType">
  <xs:annotation>
    <xs:documentation>Numerisk, to faste desimaler.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value=" *[0-9]*[0-9]\.[0-9]{2}"/>
  </xs:restriction>
</xs:simpleType>
```

7 Common (common.xsd)

The file *common.xsd* is an XML Schema consisting of an extensive number definitions of simple and complex types. This collection of type definitions support both the XML Schemas for "Byggsøk" and for "Sentral godkjenning".

The difference between simple types and complex types is the following: A simple type is an XML element that contains only text. Whereas a complex type is an XML element that contains child element structures and/or attributes.

7.1 Namespaces

The file heading is shown below, giving an overview of the namespaces used:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by Arne-Kristian Groven (Norwegian Computing Center) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:be="http://www.be.no/xml/ns/byggesak/2.0" xmlns:matrikkelenhetns="
http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/matrikkelenhet" xmlns:bygningns="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/bygning"
xmlns:adressens="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse" targetNamespace="http://www.be.no/xml/ns/byggesak/2.0" elementFormDefault="
qualified" attributeFormDefault="unqualified" version="2.0">
    <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/bygning" schemaLocation="matrikkel\bygning.xsd"/>
    <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse" schemaLocation="matrikkel\adresse.xsd"/>
    <xs:import namespace="http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/matrikkelenhet" schemaLocation="matrikkel\matrikkelenhet.xsd"/>
```

7.2 Complex types

This section, with subsections, are documenting the complex types defined in *common.xsd*.

7.2.1 AdresselinjeType

The structure of the complex type AdresselinjeType is illustrated in Figure 60.

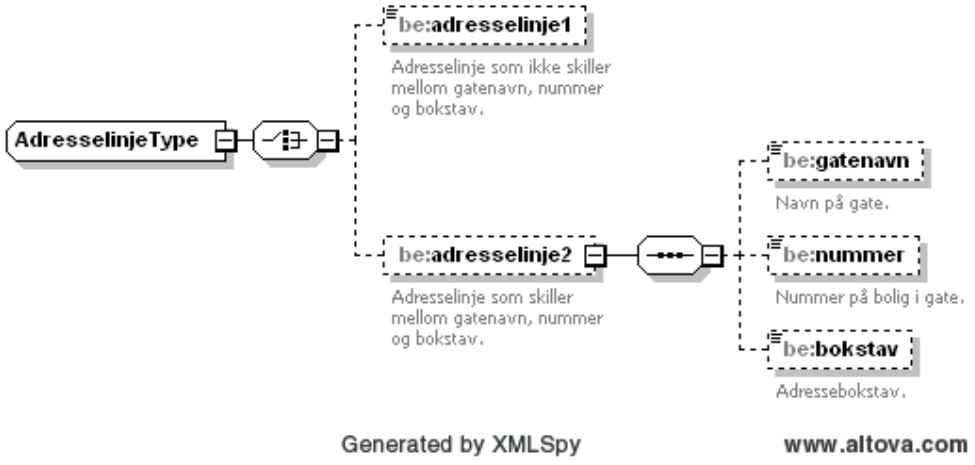


Figure 60 Complex type AdresselinjeType

The type is defined to be either the element "adresselinje1" or the element "adresselinje2".

The element "adresselinje1" is of type string.

The element "adresselinje2" is e sequence of the following elements:

- "gatenavn" of type string

- “nummer” of type nonNegativeInteger
- “bokstav” of type string

7.2.2 AnsvarligKontrollType

The structure of the complex type ” AnsvarligKontrollType” is illustrated in Figure 61.

The type contains an attribute of type boolean called “historical”

In addition, it consists of a sequence of the following elements:

- “ansvarligkontrollerende” of type PartRefType (see section 7.2.24)
- “fagomrade” of type string
- “tiltaksklasse” of type TiltaksklasseType (see section 7.3.32)
- “beskrivelseansvarsomrade” of type BeskrivelseAnsvarsomradeRefType (see section 7.2.9)
- “signertelektronisk” of type boolean
- “utdanning” of type UtdanningType (see section 7.2.32)
- “kvalitetssikringtilpasset” of type boolean.

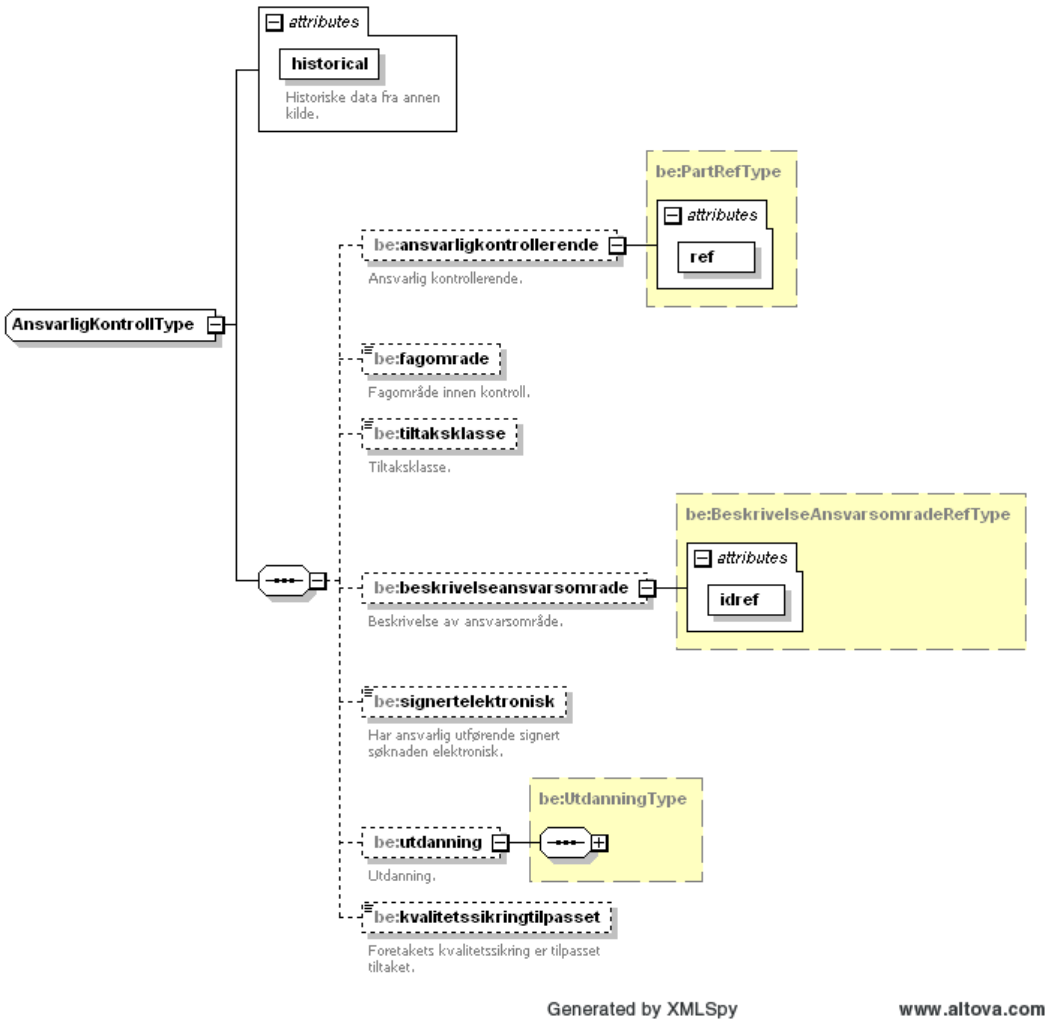


Figure 61 Complex type AnsvarligKontrollType

7.2.3 AnsvarligProsjekteringType

The structure of the complex type ” AnsvarligProsjekteringType” is illustrated in Figure 62.

The type contains an attribute of type boolean called “historical”. In addition, it consists of a sequence of the following elements:

- “ansvarligprosjekterende” of type PartRefType (see section 7.2.24)
- “fagomrade” of type string
- “tiltaksklasse” of type TiltaksklasseType (see section 7.3.32)
- “referanseansvarsomrade” of type BeskrivelseAnsvarsomradeRefType (see section 7.2.9)
- “samsvarserkleringrammetillatelse” of type boolean

- “samsvarserkleringigangsettingstillatelse” of type boolean
- “samsvarserkleringferdigattest” of type boolean
- “signertelektronisk” of type boolean
- “utdanning” of type UtdanningType (see section 7.2.32)
- “ansvarsomradedekkes” of type BooleanDelvisType (see section 7.3.6)
- “nyereferanseprosjekter” of type boolean
- “referanseprosjekter”, with zero or more elements of type ProsjektType (see section 7.2.26)
- “kvalitetssikringtilpasset” of type boolean

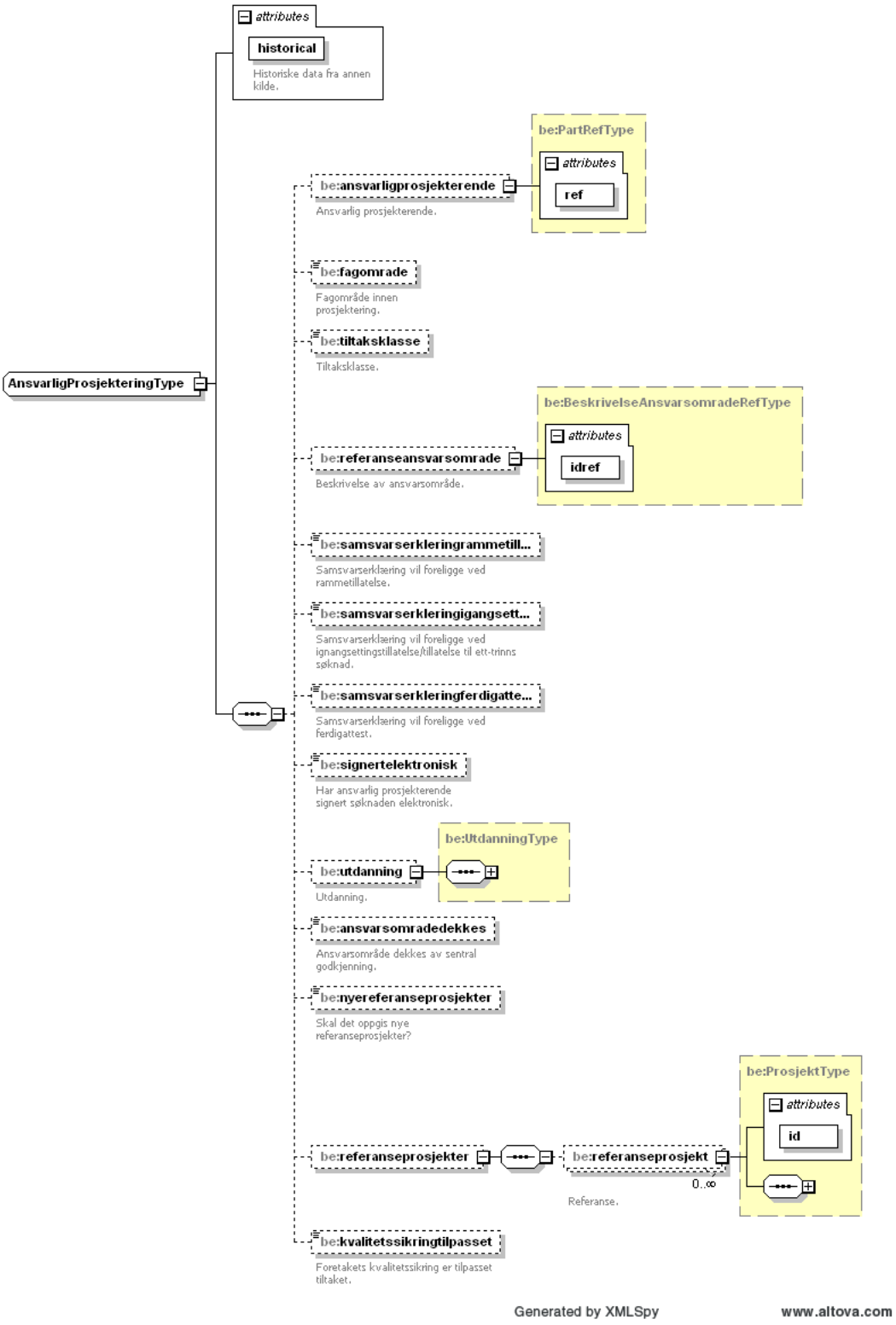


Figure 62 Complex type AnsvarligProsjekteringType

7.2.4 AnsvarligUtforelseType

The structure of the complex type is illustrated in Figure 63.

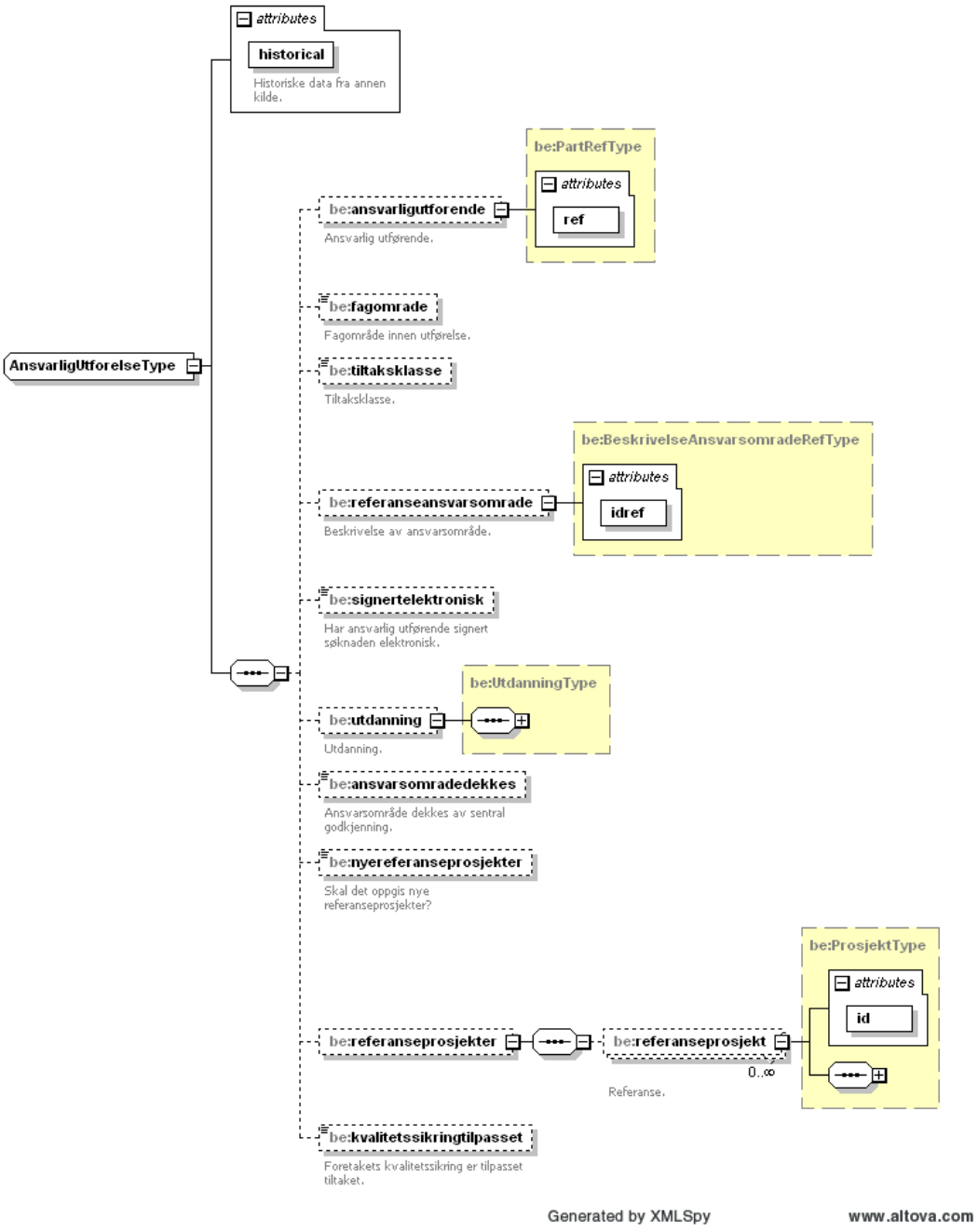


Figure 63 Complex type AnsvarligUtforelseType

The type contains an attribute of type boolean called “historical”. In addition, it consists of a sequence of the following elements:

- “ansvarligutforende” of the complex type PartRefType (see section 7.2.24)
- “fagomrade” of type string
- “tiltaksklasse” of type TiltaksklasseType (see section 7.3.32)

- “referanseansvarsomrade” of type BeskrivelseAnsvarsomradeRefType (see section 7.2.9)
- “signertelektronisk” of type boolean
- “utdanning” of type UtdanningType (see section 7.2.32)
- “ansvarsomradedekkes” of type BooleanDelvisType (see section 7.3.6)
- “nyereferanseprosjekter” of type boolean
- “referanseprosjekter”, with zero or more elements of type ProsjektType (see section 7.2.26)
- “kvalitetssikringtilpasset” of type boolean

7.2.5 AnsvarligSokerType

The structure of the complex type is illustrated in Figure 64.

It consists of a sequence of the following elements:

- “ansvarligsokende” of type PartRefType (see section 7.2.24)
- “utdanning” of type UtdanningType (see section 7.2.32)
- “ansvarsomradedekkes” of type BooleanDelvisType (see section 7.3.6)
- “kvalitetssikringtilpasset” of type boolean
- “nyereferanseprosjekter” of type boolean
- “referanseprosjekter”, with zero or more elements of type ProsjektType (see section 7.2.26)
- “ansvarligsokersignert” of type boolean

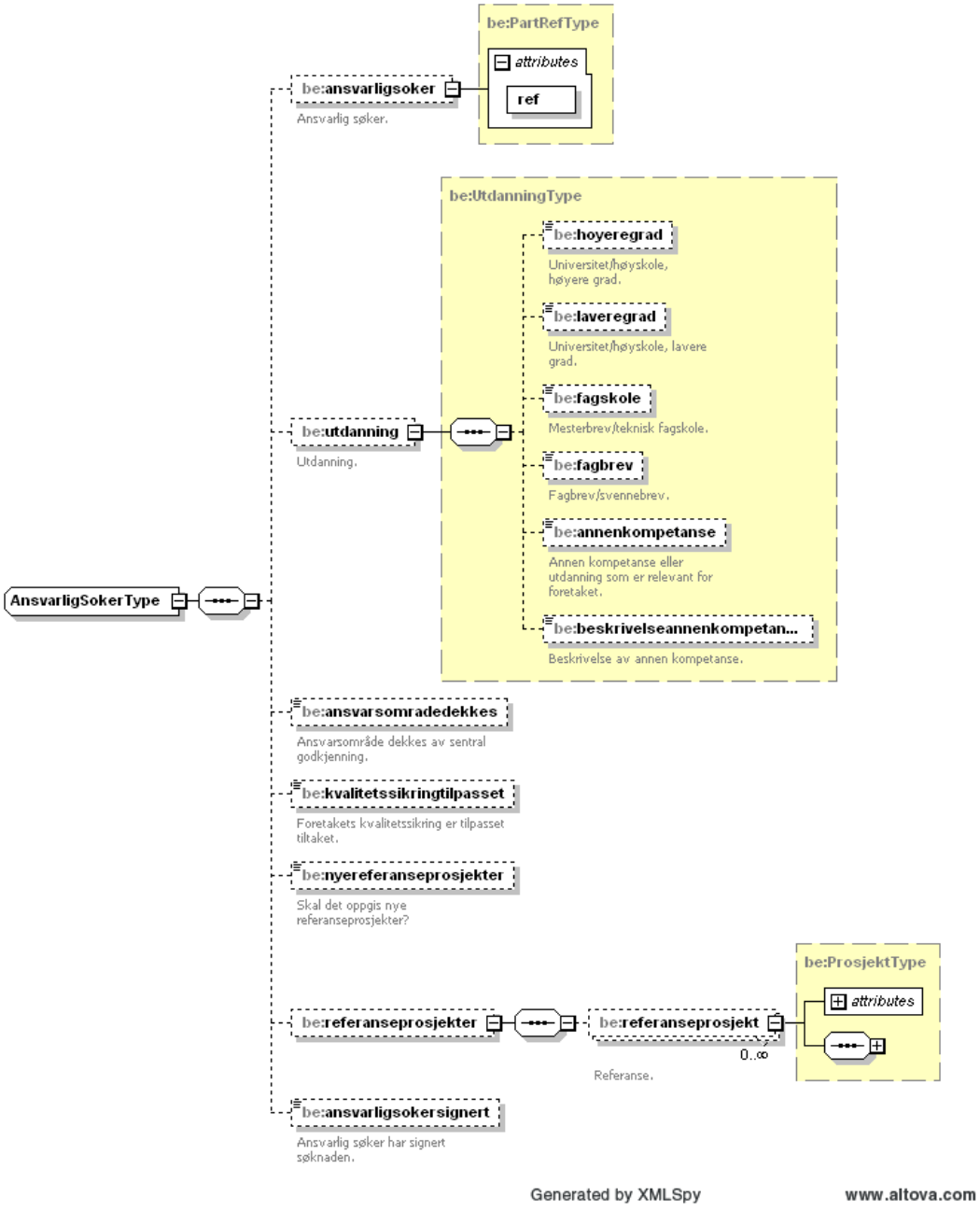


Figure 64 Complex type AnsvarligSokerType

7.2.6 ArealfordelingType

The structure of the complex type is illustrated in Figure 65.

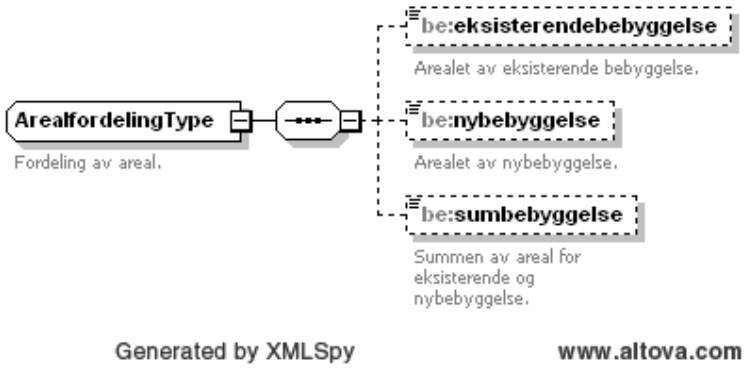


Figure 65 Complex type ArealfordelingType

It consists of a sequence of the following elements:

- "eksisterendebebyggelse" of type PartRefType (see section 7.2.24)
- "nybebyggelse" of type UtdanningType (see section 7.2.32)
- "sumbebyggelse" of type BooleanDelvisType (see section 7.3.6)

7.2.7 ArealType

The structure of the complex type is illustrated in Figure 66.

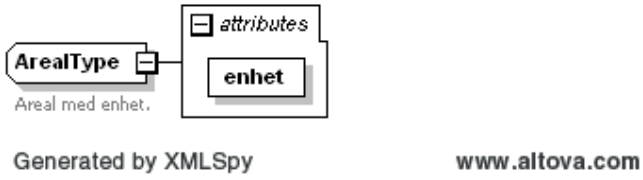


Figure 66 Complex type ArealType

ArealType is an extension of the decimal type. It also contains an attribute of the ArealEnhetType presented in section 7.3.3.

7.2.8 BeskrivelseAnsvarsomradeType

The structure of the complex type is illustrated in Figure 67.

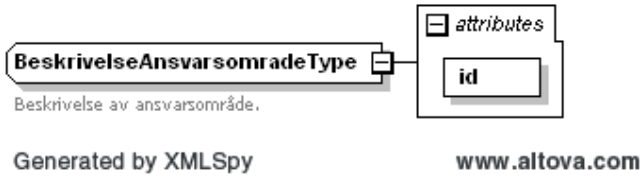


Figure 67 Complex type BeskrivelseAnsvarsomradeType

BeskrivelseAnsvarsomradeType is an extension of the string type. It also contains an attribute of the predefined ID type.

7.2.9 BeskrivelseAnsvarsomradeRefType

The structure of the complex type "" is illustrated in Figure 68.

Figure 68 Complex type BeskrivelseAnsvarsomradeRefType

BeskrivelseAnsvarsomradeRefType contains an attribute of type IDREF.

7.2.10 EiendomType

The structure of the complex type " EiendomType" is illustrated in Figure 69.

It consists of three elements:

- "matrikkel"
- "adresse"
- "fradeltareal"

The types of the first two elements will be presented in the next two subsections.

The element "fradeltareal" is of type decimal.

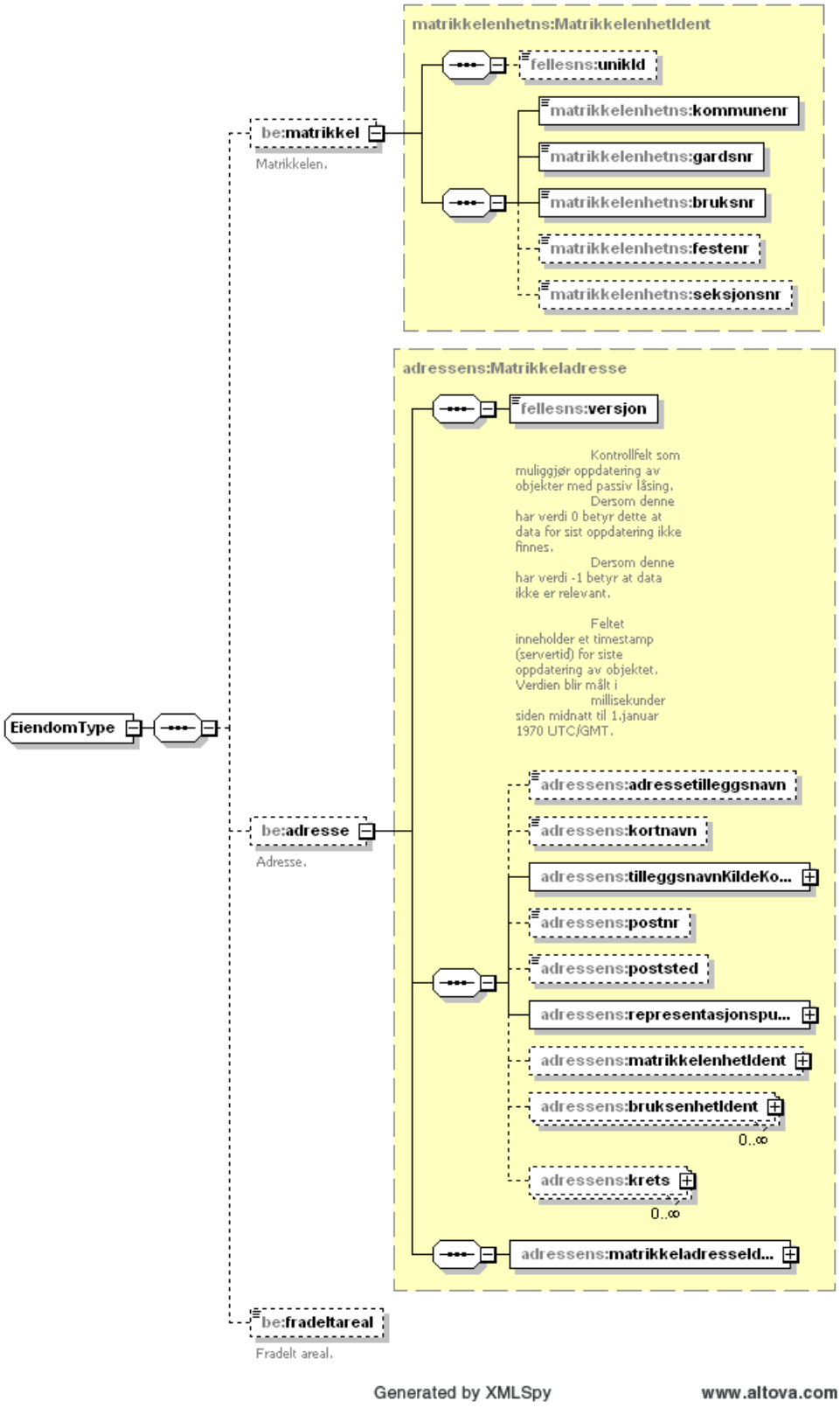


Figure 69 Complex type EiendomType

7.2.10.1 matrikkel

The element called “matrikkel” is of the complex type ”matrikkelenhetns:Matrikkelenhet” as illustrated in Figure 70. The namespace is the following:

- http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/matrikkelenhet

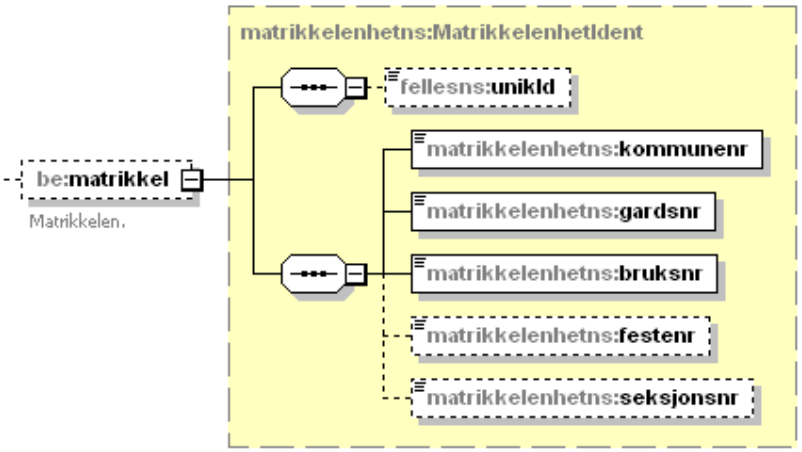


Figure 70 Complex type matrikkelenhetns:Matrikkelenhet

The details of this externally defined complex type will not be presented apart from what can be seen in Figure 70.

7.2.10.2 adresse

The element called “adresse” is of the complex type ” adressens:Matrikkeladresse” as illustrated in Figure 71. The namespace is the following:

- http://matrikkel.statkart.no/eksternapi/innsyn/v3/modell/adresse

The details of this externally defined complex type will not be presented apart from what can be seen in Figure 71.

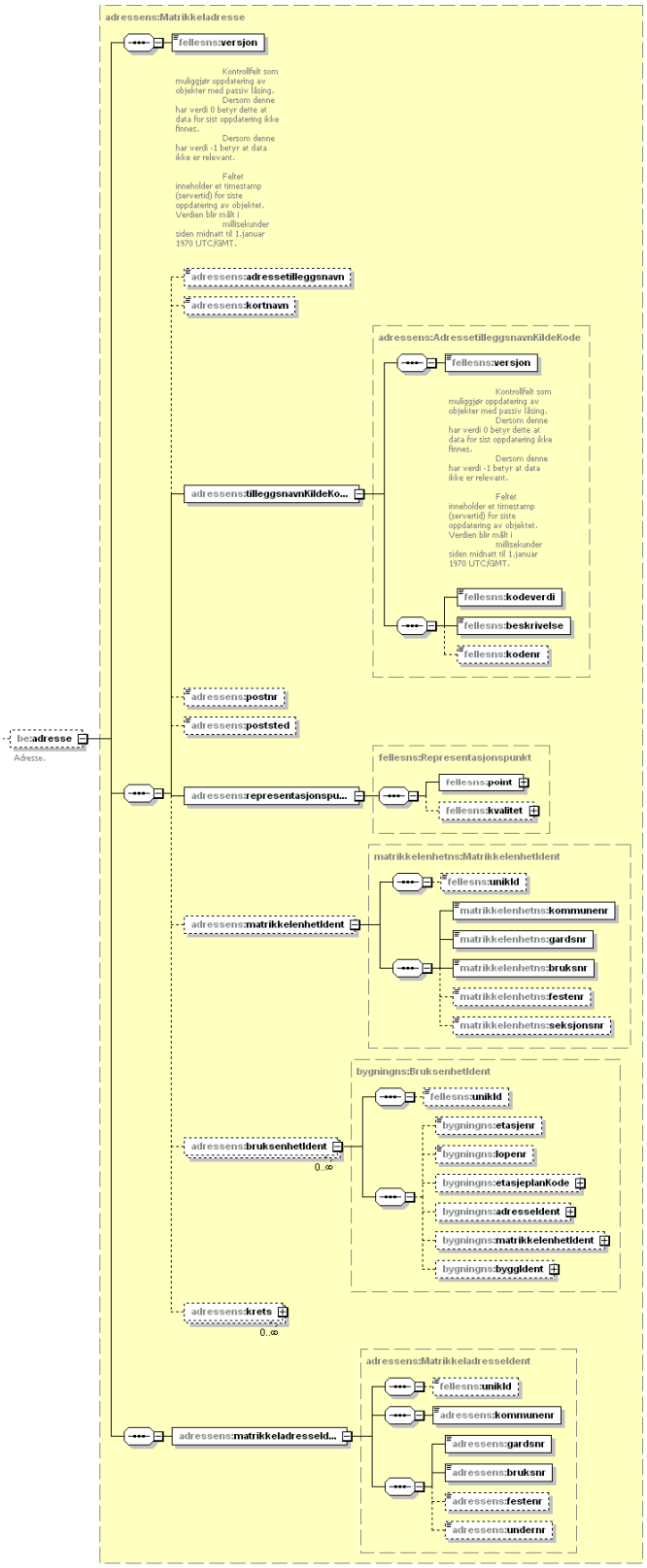


Figure 71 Complex type adressens:Matrikkeladresse

7.2.11 EiendomsadresseType

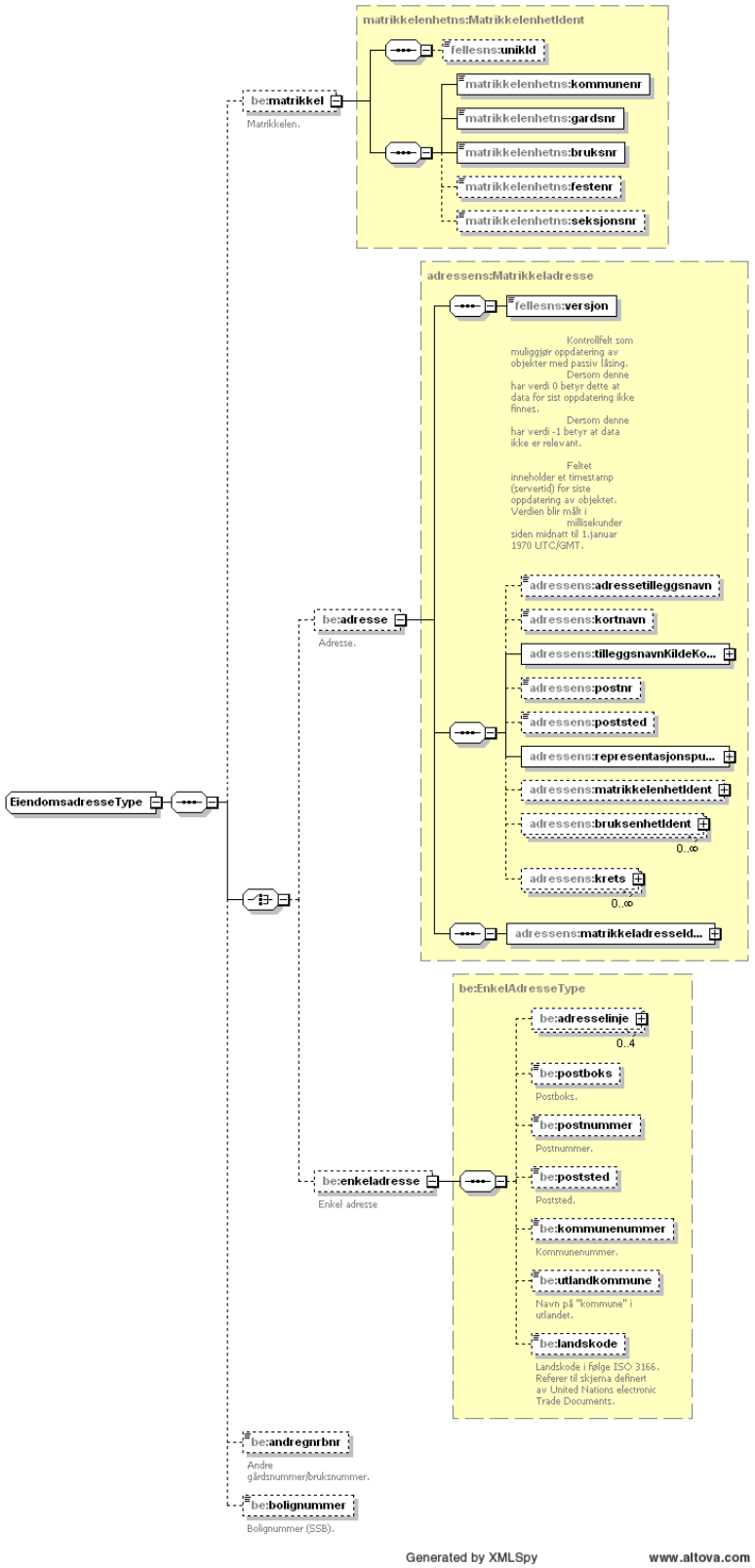


Figure 72 Complex type EiendomsadresseType

The structure of this complex type is illustrated in Figure 72. It consists of the following sequence of elements:

- "matrikkel" of type matrikkelenhetns:MatrikkelenhetIdent (see section 7.2.10.1)
- "adresse" of type adressens:Matrikkeladresse (see section 7.2.10.2)
- "enkeladresse" of type be:EnkelAdresseType () (Included 27. June 2011)
- "andregnrbnr" of type string
- "bolignummer" of simple pattern type BolignummerType (see section 7.4.1)

7.2.12 EnheterfordelingType

The structure of this complex type is illustrated in Figure 73.

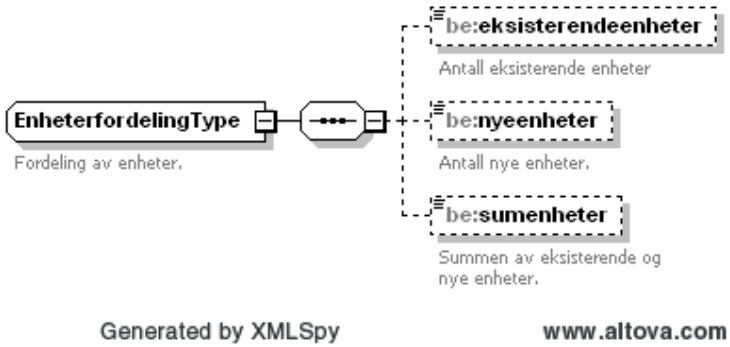


Figure 73 Complex type EnheterfordelingType

It consists of the following sequence of elements:

- "matrikkel" of type matrikkelenhetns:MatrikkelenhetIdent (see section 7.2.10.1)
- "adresse" of type adressens:Matrikkeladresse (see section 7.2.10.2)
- "andregnrbnr" of type string
- "bolignummer" of simple pattern type BolignummerType (see section 7.4.1

7.2.13 EnkelAdresseType

The structure of the complex type "" is illustrated in Figure 74.

It consists of the following sequence of elements:

- "adresselinje" of type AdresselinjeType (see section 7.2.1)
- "postboks" of type string

- "postnummer" of type string (Changed 27. June 2011: From SimpleNumberType)
- "poststed" of type string
- "kommunenummer" of type KommunenummerType (see section 7.3.18)
- "utlandkommune" of type string
- "landskode" of type CountryCodeType (see section 7.3.9)

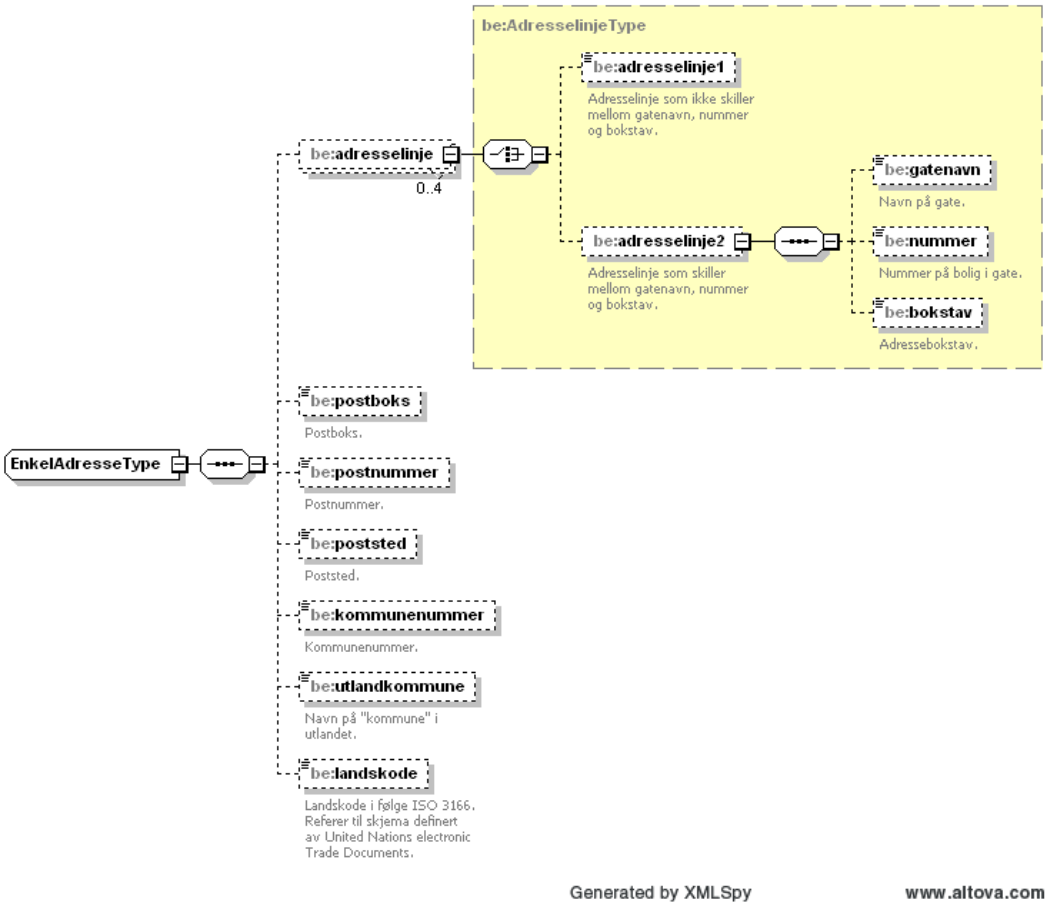


Figure 74 Complex type EnkelAdresseType

7.2.14 ErkleringType

The structure of the complex type is illustrated in Figure 75.

The type contains an attribute of type boolean called "historical". In addition, it consists of a sequence of the following elements:

- "ansvarlig" of type PartRefType (see section 7.2.24)
- "ansvarsomrade" of type BeskrivelseAnsvarsomradeRefType (see section 7.2.9)
- "erkleringsignert" of type boolean

- "signertdato" of type date

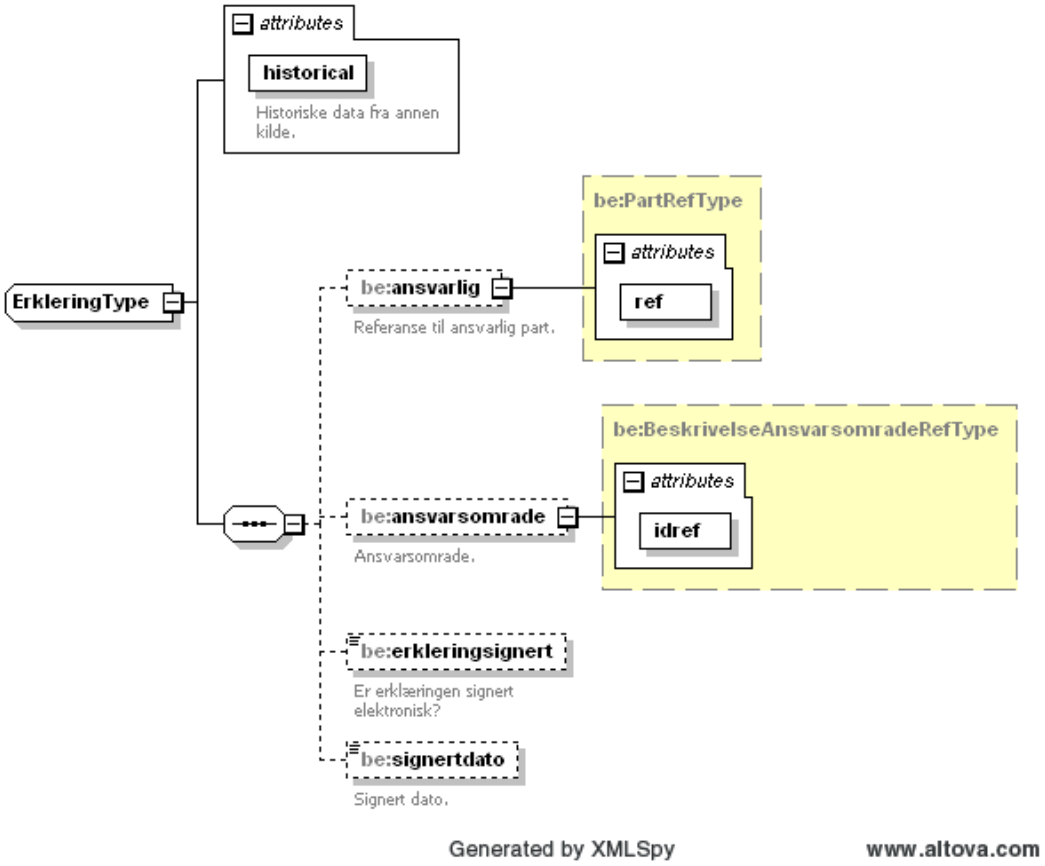


Figure 75 Complex type ErkleringType

7.2.15 ForetakType

The structure of the complex type is illustrated in Figure 76.

It consists of the following sequence of elements:

- "generelleopplysninger"
- "organisasjon"
- "godkjenningsomrader", zero or more instances of elements of type OmradeType (see section 7.2.21)
- "kompetanse" of type KompetanseType (see section 7.2.17)
- "forbedringstiltak" of type string
- "organisering" of type OrganiseringType (see section 7.2.22)

The nested element structures "generelleopplysninger" and "organisajon" will be presented in detail in the following two sub sections.

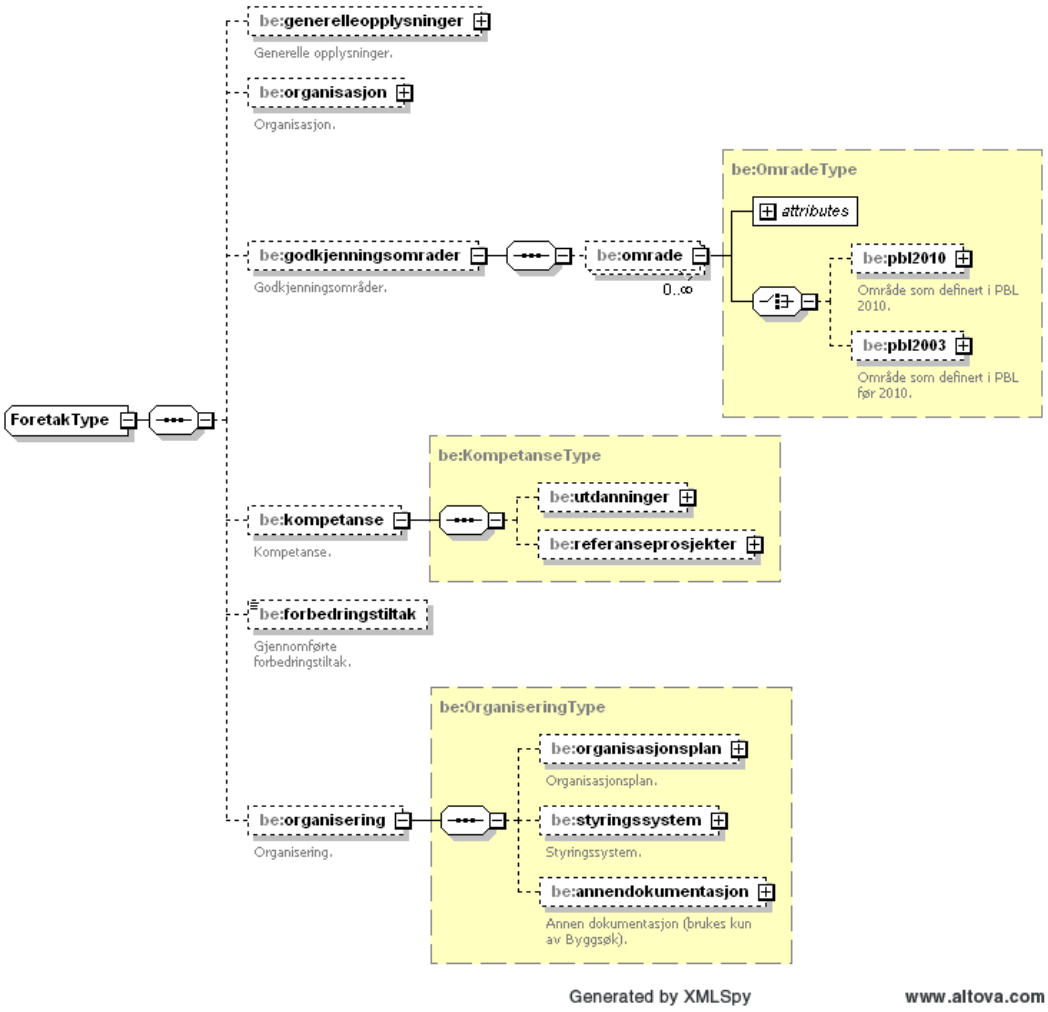


Figure 76 Complex type ForetakType

7.2.15.1 generelleopplysninger

The element structure "generelleopplysninger" is illustrated in Figure 77.

It consists of the following sequence of elements:

- "organisasjonsnummer" of type OrganisasjonsnummerType (see section 7.4.4)
- "navn" of type string
- "url" of type anyURI
- "epostadresse" of type EmailAddressType (see section 7.4.2)
- "telefonnummer" of type PhoneNumberType (see section 7.4.5)
- "telefaxnummer" of type PhoneNumberType (see section 7.4.5)
- "kontaktinformasjon" of type KontaktinformasjonType (see section 7.2.18)

- ”forretningsadresse” of type EnkelAdresseType (see section 7.2.13)
- “posterlikforretningsadresse” of type boolean
- “postadresse” of type EnkelAdresseType (see section 7.2.13)
- “fakturaadresseerlik” of type boolean
- “postadresse” of type EnkelAdresseType (see section 7.2.13)

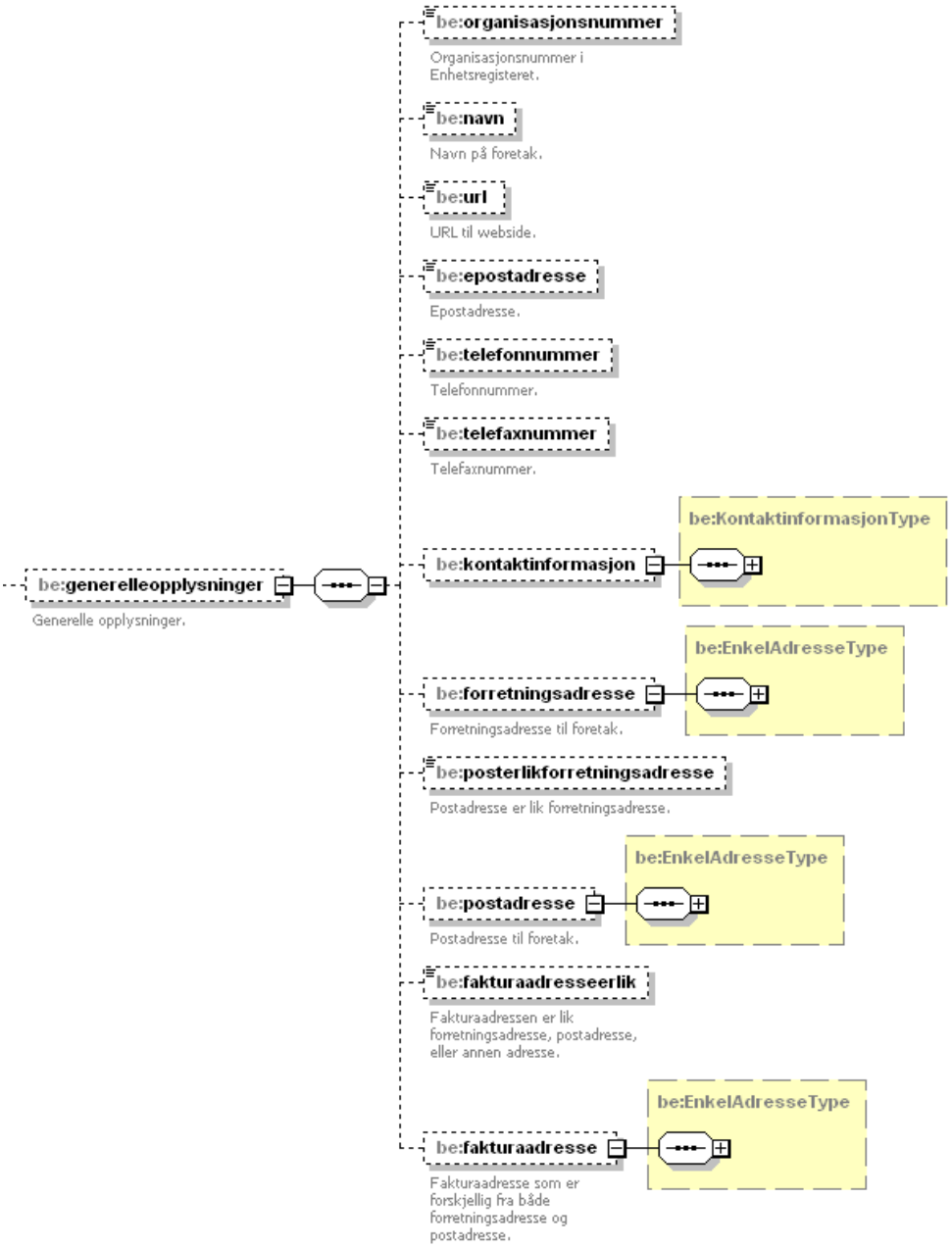


Figure 77 ’generelleopplysninger’ within ForetakType

7.2.15.2 organisasjon

The element structure "generelleopplysninger" is illustrated in Figure 78.

It consists of the following sequence of elements:

- "organisasjonsform" of type string
- "registrertienhetsregisteret" of type date
- "stiftelsesdato" of type date
- "neringskoder", one or more instances of elements of type NeringskodeType (see section 7.4.3)
- "antallansatte" of type nonNegativeInteger
- "harflereavdelingeretc" of type boolean
- "antallavdelingeretc" of type nonNegativeInteger
- "brukerunderleverandorer" of type boolean

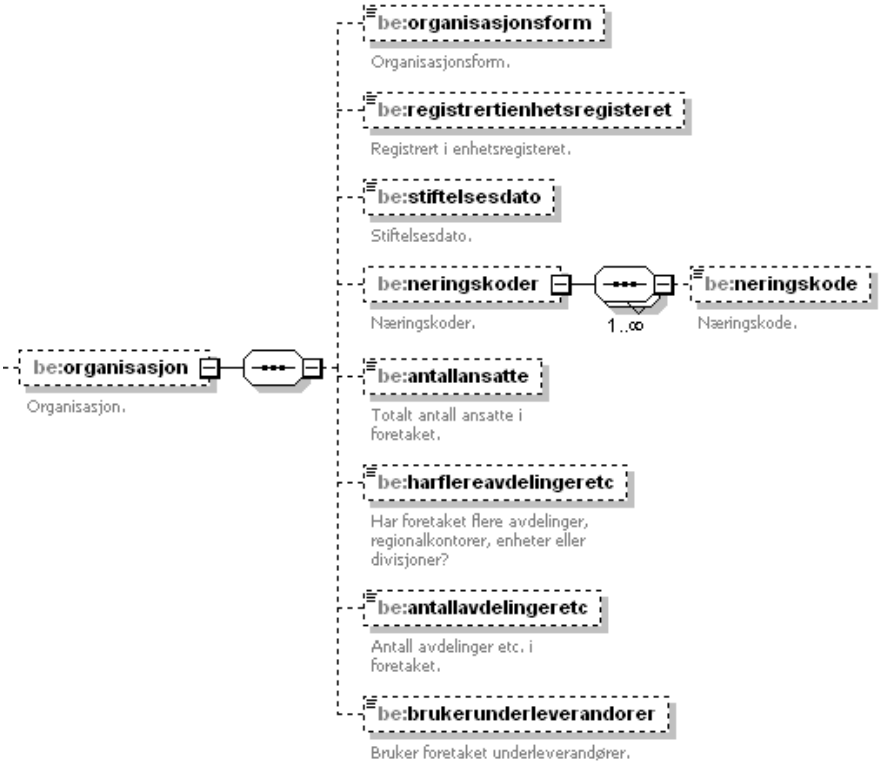


Figure 78 'organisasjon' within ForetakType

7.2.16 GodkjentMedBegrunnelseType

The structure of the complex type is illustrated in Figure 79.

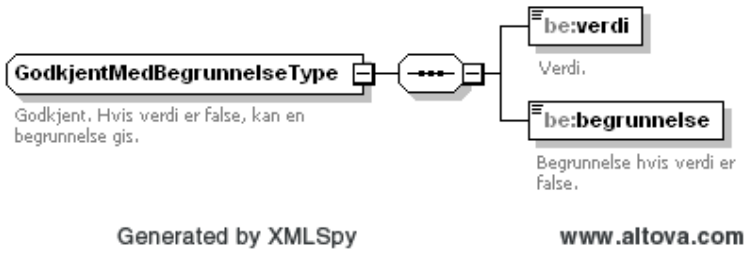


Figure 79 Complex type GodkjentMedBegrunnelse

It consists of the following sequence of elements:

- "verdi" of type boolean
- "begrunnelse" of type string

7.2.17 KompetanseType

The structure of the complex type is illustrated in Figure 80.

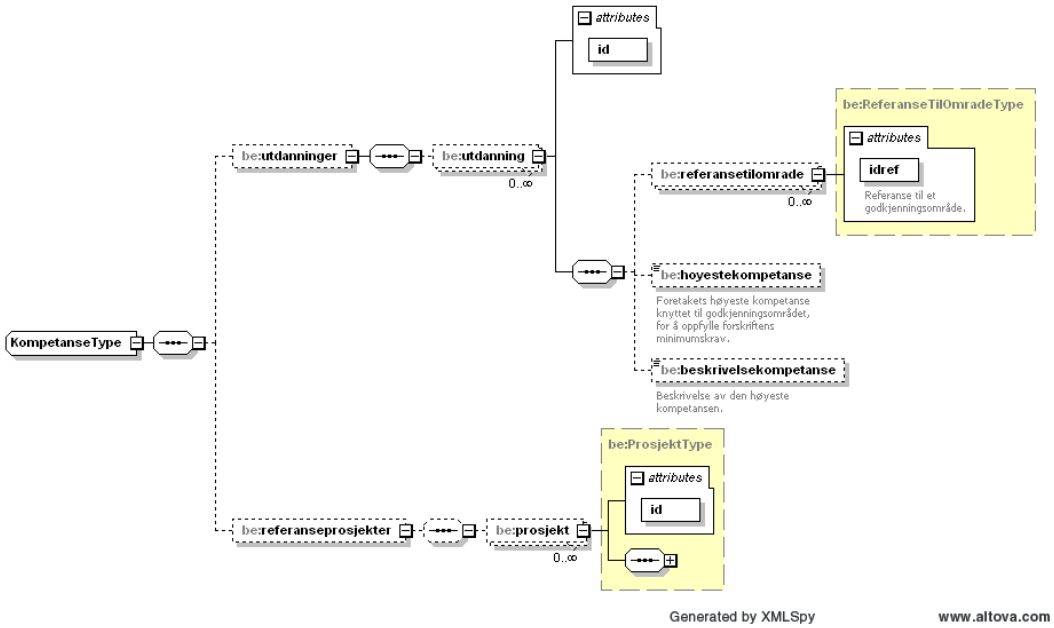


Figure 80 Complex type KompetanseType

It consists of the following sequence of elements:

- "utdanninger", which again is zero or more instances of "utdanning"
- "referanseprosjekter", which is zero or more instances of "prosjekt" of type ProsjektType (see section 7.2.26)

The element "utdanning" will be further described in the following subsection.

7.2.17.1 utdanning

The element contains an attribute called “id”. In addition, it consists of a sequence of the following elements:

- “referansetilomrade” of type ReferanseTilOmradeType (see section 7.2.27)
- “hoyestekompetanse” of type UtdanningsNivaType (see section 7.3.33)
- “beskrivelsekompetanse” of type string

7.2.18 KontaktinformasjonType

The structure of the complex type is illustrated in Figure 81.

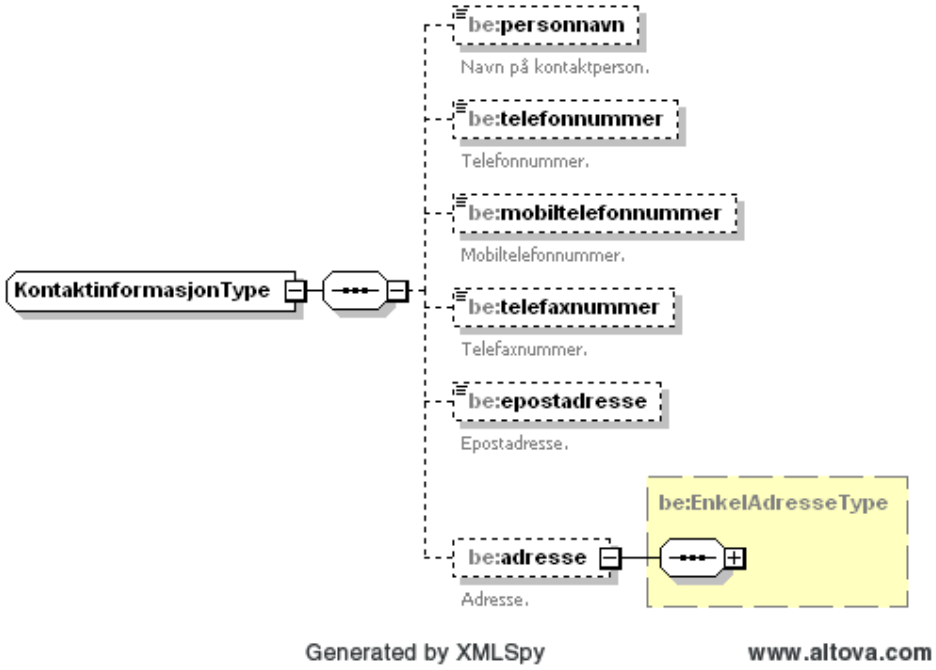


Figure 81 Complex type KontaktinformasjonType

It consists of the following sequence of elements:

- “personnavn” of type string
- “telefonnummer” of type PhoneNumberType (see section 7.4.5)
- “mobiltelefonnummer” of type PhoneNumberType (see section 7.4.5)
- “telefaxnummer” of type PhoneNumberType (see section 7.4.5)
- “epostadresse” of type EmailAddressType (see section 7.4.2)
- ”adresse” of type EnkelAdresseType (see section 7.2.13)

7.2.19 KontrollerkleringType

The structure of the complex type is illustrated in Figure 82.

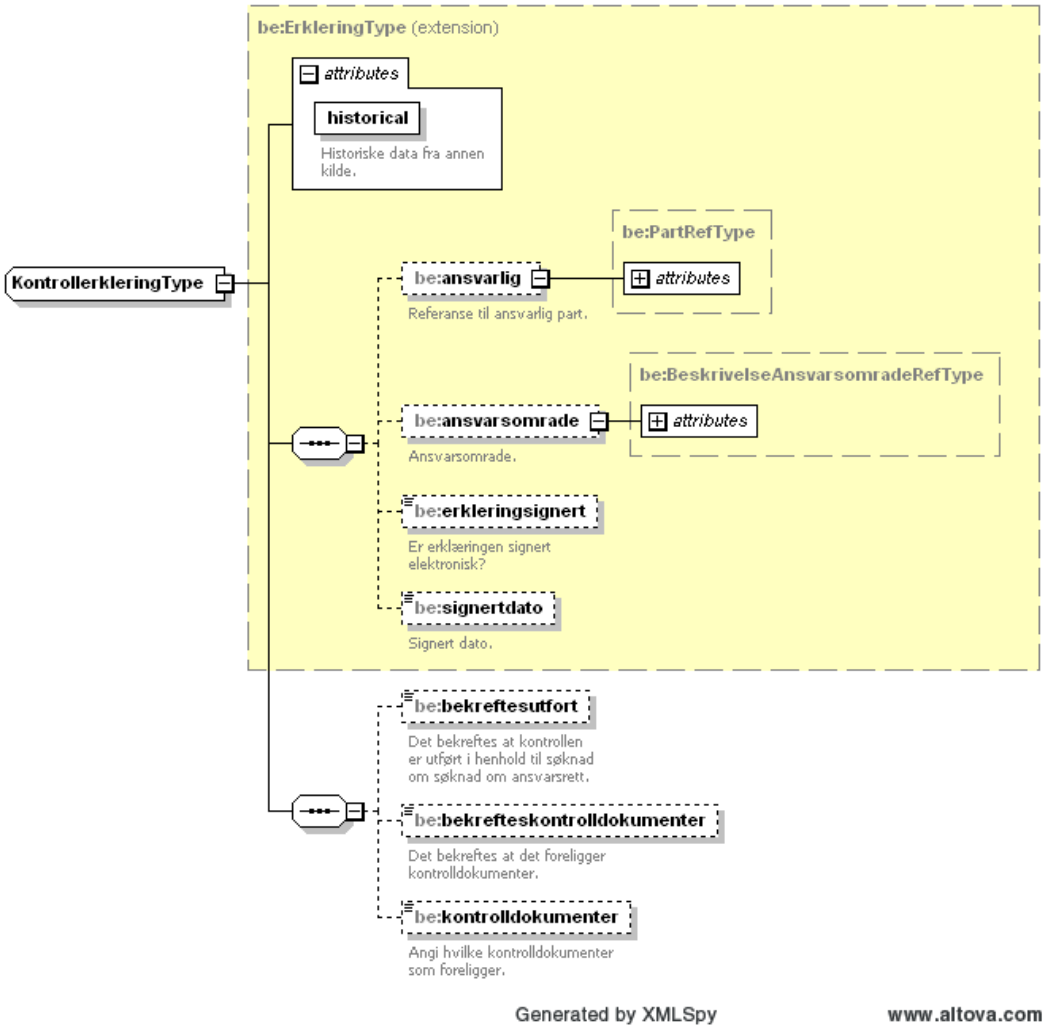


Figure 82 Complex type KontrollerkleringType

This type is an extension of type ErkleringType (see section 7.2.14)

The extension is a sequence of the following elements:

- "bekreftesutfort" of type boolean
- "bekrefteskontrolldokumenter"
- "kontrolldokumenter" of type string

7.2.20 LengdeType

The structure of the complex type "" is illustrated in Figure 83.

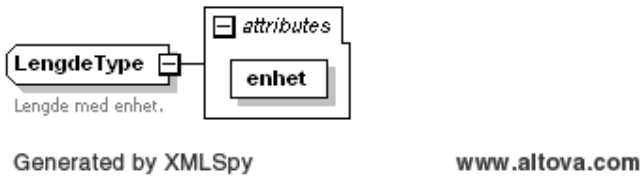


Figure 83 Complex type LengdeType

The type contains an attribute called “enhet” of type LengdeenhetType (see section 7.3.19).

7.2.21 OmradeType

The structure of the complex type ”” is illustrated in Figure 84.

It consists of a choice between the two element structures:

- “pbl2010”
- “pbl2003”

The structure of both “pbl2010” and “pbl2003” consist of the following sequence of sub elements:

- “funksjon”
- “tiltaksklasse” of type integer, restricted to the values: 1,2, and 3
- “utlopsdato” of type date

But the element “funksjon” is different in the “pbl2010” structure compared to the “pbl2003”structure, as explained in the following.

7.2.21.1 funksjon in pbl2010

The element ”funksjon” represent in ”publ2010” a choice between the following elements:

- “sok”
- “pro” of type FagomradeProsjekteringType (see section 7.3.14)
- “utf” of type FagomradeUtforelseType (see section 7.3.15)
- “ktr” of type FagomradeKontrollType(see section 7.3.12)

7.2.21.2 funksjon in pbl2003

The element ”funksjon” represent in ”publ2010” a choice between the following elements:

- “sok” of type FagomradePBL2003Type (see section 7.3.13)
- “pro” of type FagomradePBL2003Type (see section 7.3.13)
- “utf” of type FagomradePBL2003Type (see section 7.3.13)

- "kpr" of type FagomradePBL2003Type (see section 7.3.13)
- "kut" of type FagomradePBL2003Type (see section 7.3.13)

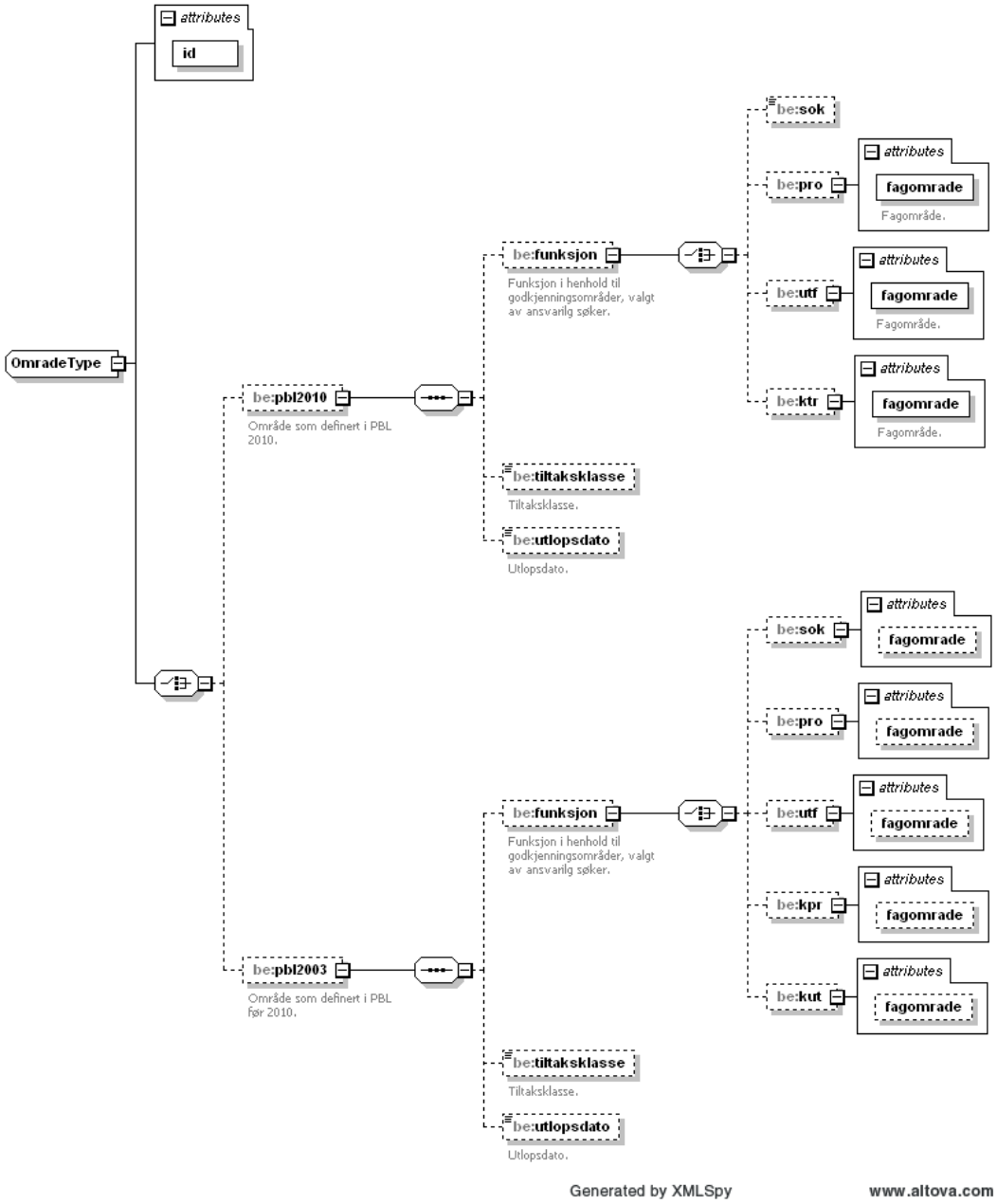


Figure 84 Complex type OmradeType

7.2.22 OrganiseringType

The structure of the complex type is illustrated in Figure 85.

It consists of a sequence of three nested elements:

- "organisasjonsplan"

- "styringssystem"
- "annendokumentasjon"

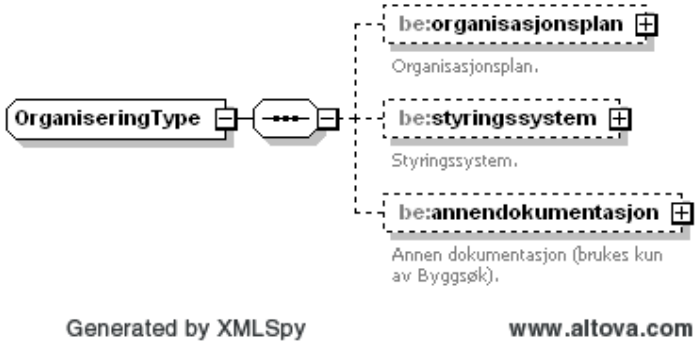


Figure 85 Complex type OrganiseringType

Their details will be presented in the following.

7.2.22.1 organisasjonsplan

The structure of this element is illustrated in Figure 86.

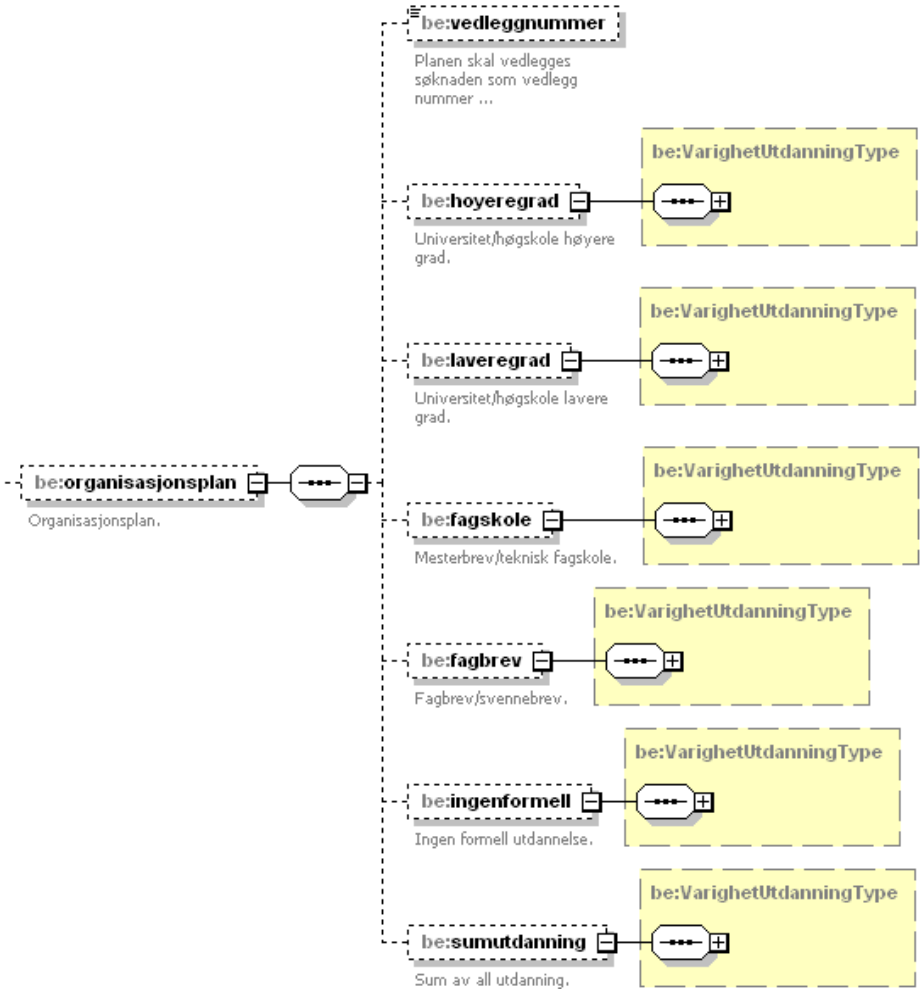


Figure 86 'organisasjonsplan' within OrganiseringType

It consists of the following sequence of elements:

- "vedleggsnummer" of type string
- "hoyeregrad" of type VarighetUtdanningType (see section 7.2.33)
- "laveregrad" of type VarighetUtdanningType (see section 7.2.33)
- "fagskole" of type VarighetUtdanningType (see section 7.2.33)
- "fagbrev" of type VarighetUtdanningType (see section 7.2.33)
- "ingenformell" of type VarighetUtdanningType (see section 7.2.33)
- "sumutdanning" of type VarighetUtdanningType (see section 7.2.33)

7.2.22.2 styringssystem

The structure of this element is illustrated in Figure 87.

It consists of the following sequence of elements:

- "utvikletav" of type string restricted to one of the two values: egenutviklet, eksternleverandor
- "eksternleverandor" of type string
- "navnpasystem" of type string
- "ertilpassetorganisasjon" of type boolean
- "internrevisjon" of type RevisjonType (see section 7.2.28)
- "eksternrevisjon" of type RevisjonType (see section 7.2.28)
- "organisasjonsplan" of type boolean
- "styringavandreforetak" of type boolean
- "ivaretarplikter" of type boolean
- "oppfyllelseavkrav" of type boolean
- "rutinerforkunnskaper" of type boolean
- "rutinerforavvik" of type boolean
- "rutinerfordokumentasjon" of type boolean
- "rutinerforgjennomgang" of type boolean

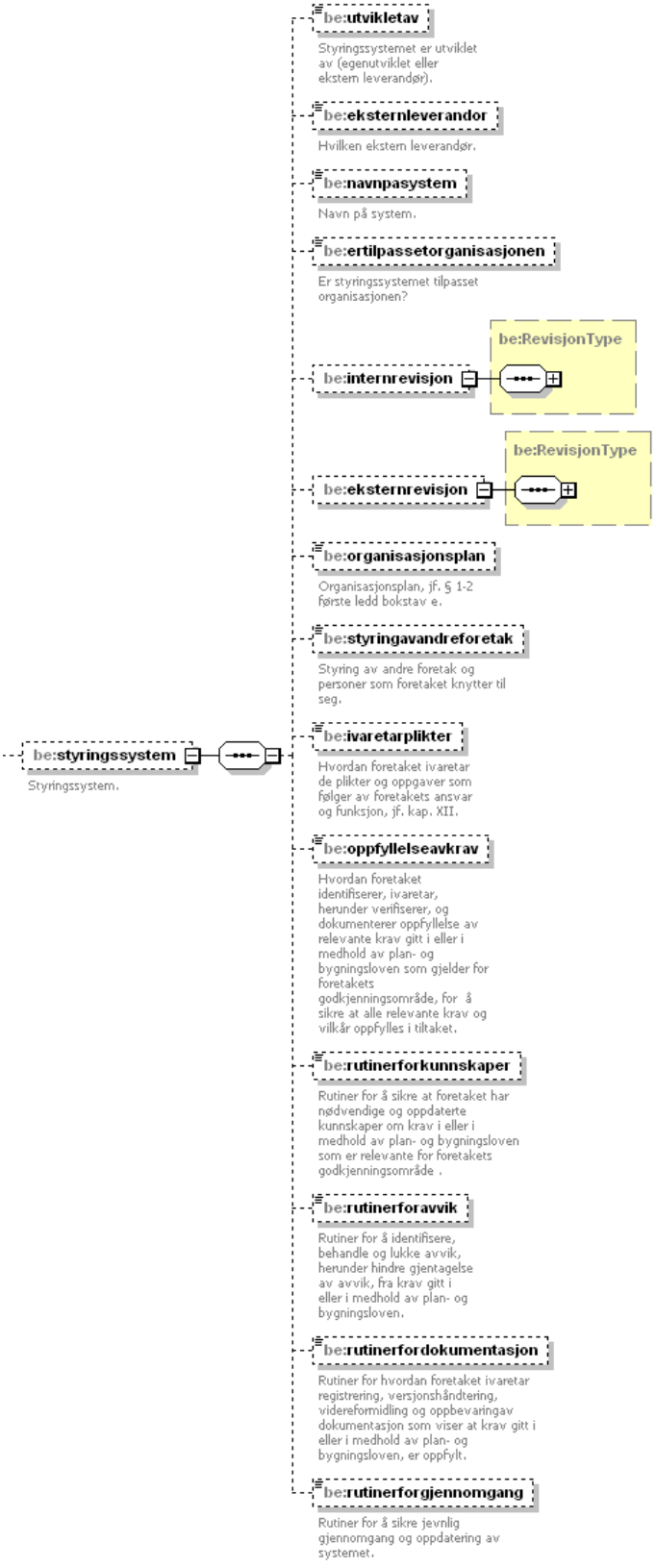


Figure 87 ’styringssystem’ within OrganiseringType

7.2.22.3 annendokumentasjon

The structure of this element is illustrated in Figure 88.

It consists of the following sequence of elements:

- "tidligeresendtkommunen" of type boolean
- "kommunenssaksnummer" of type string

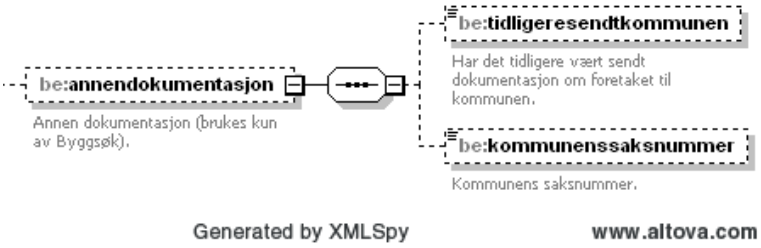


Figure 88 'annendokumentasjon' within OrganiseringType

7.2.23 ParsellType

The structure of the complex type is illustrated in Figure 89.

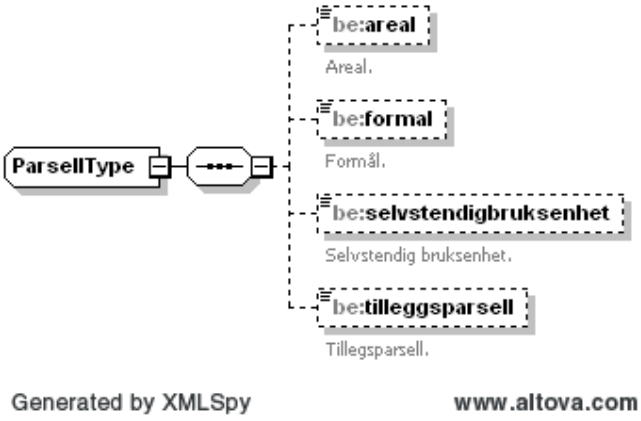


Figure 89 Complex type ParsellType

It consists of the following sequence of elements:

- "areal" of type decimal
- "formal" of type string
- "selvstendigbruksenhet" of type boolean
- "tilleggsparsell" of type boolean

7.2.24 PartRefType

The structure of the complex type "" is illustrated in Figure 90.

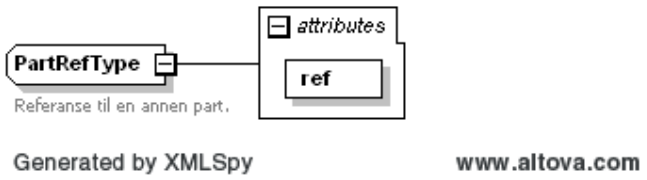


Figure 90 Complex type PartRefType

The type contains an attribute called “ref” of type IDREF.

7.2.25 PartType

The structure of the complex type ”” is illustrated in Figure 91.

It consists of the following sequence of elements:

- “foretak” of type FortakType (see section 7.2.15)
- “privatperson”
- “organisasjon” of type FortakType (see section 7.2.15)
- “offentligmyndighet”

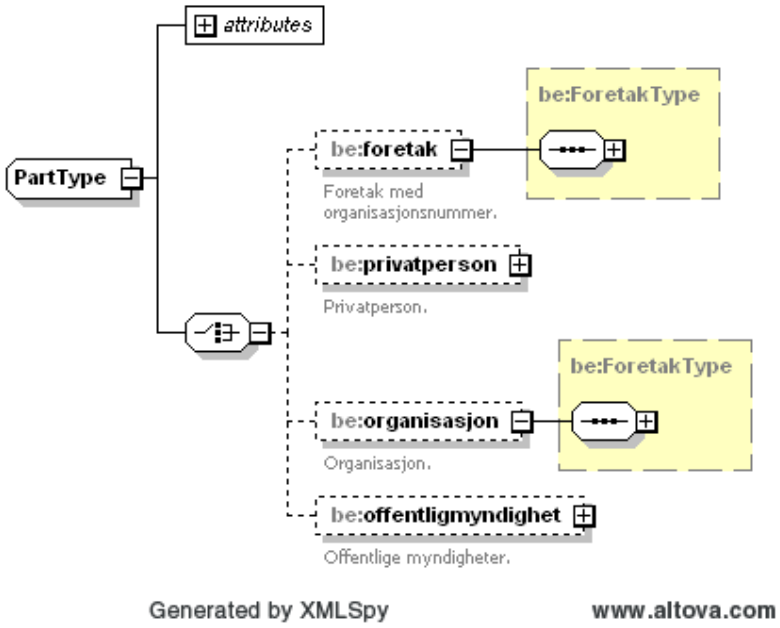


Figure 91 Complex type PartType

The nested elements “privatperson” and “offentligmyndighet” is presented in more detail in the following sub sections.

7.2.25.1 privatperson

The structure of this element is illustrated in Figure 92.

It consists of the following sequence of elements:

- "navn" of type string
- "kontaktinformasjon" of type KontaktinformasjonType (see section 7.2.18)
- "adresse" of type EnkelAdresseType (see section 7.2.13)
- "omrade" of type OmradeType (see section 7.2.21)

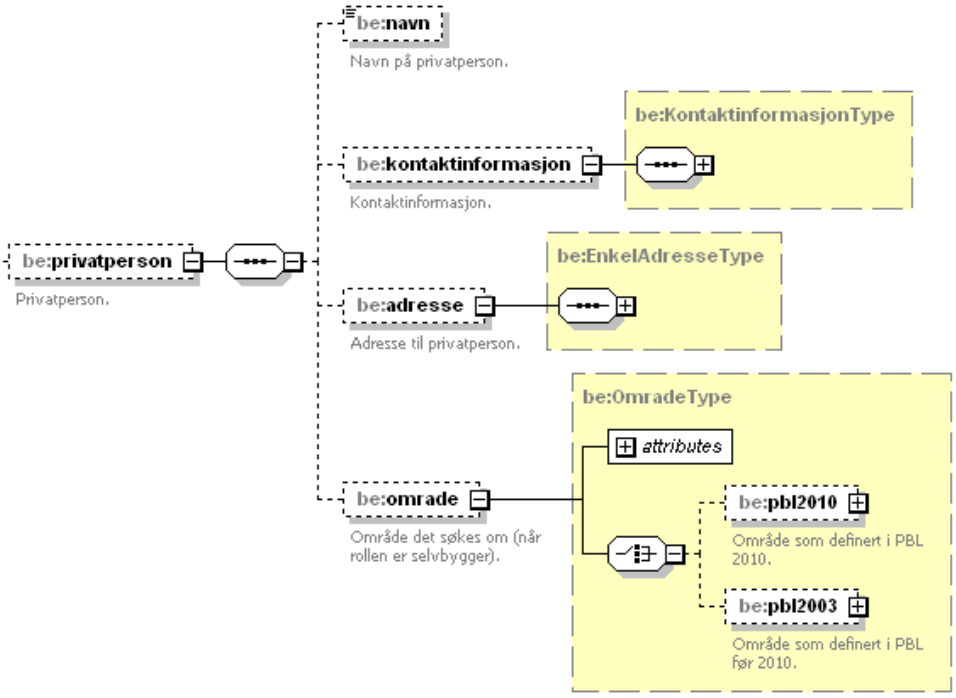


Figure 92 'privatperson' within PartType

7.2.25.2 offentligmyndighet

The structure of this element is illustrated in Figure 93.

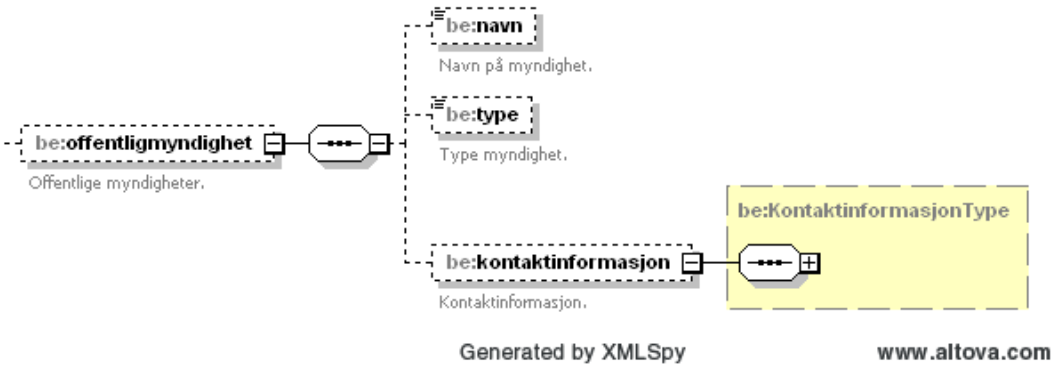


Figure 93 'offentligmyndighet' within PartType

It consists of the following sequence of elements:

- "navn" of type string
- "type" of type MyndighetType (see section 7.3.20)
- "kontaktinformasjon" of type KontaktinformasjonType (see section 7.2.18)

7.2.26 ProsjektType

The structure of the complex type "" is illustrated in Figure 94.

The type contains an attribute called "id".

It consists of the following sequence of elements:

- "referansetilomrade", zero or more occurrences, of type ReferanseTilOmradeType (see section 7.2.27)
- "ferdigattestgittar" of type nonNegativeInteger
- "bygningstype" of type BygningstypekodeType (see section 7.3.8)
- "anleggstype" of type AnleggsstypekodeType (see section 7.3.1)
- "hvorforrelevant" of type string
- "kommunenummer" of type KommunenummerType (see section 7.3.18)
- "utlandkommune" of type string
- "identifikasjon"
- "foretaketsreferanse" of type boolean
- "ansvarsrettgodkjenningsområde" of type boolean

- “tilknytningentrepriseform” of type string
- “attestreferanse” of type boolean
- “navnpaansatt” of type string
- “rolleireferanseprosjektet” of type string
- “navnpaannetforetak” of type string
- “kontaktpersonireferanseprosjektet” of type string

The element “identifikasjon” will be presented in detail in the following subsection.

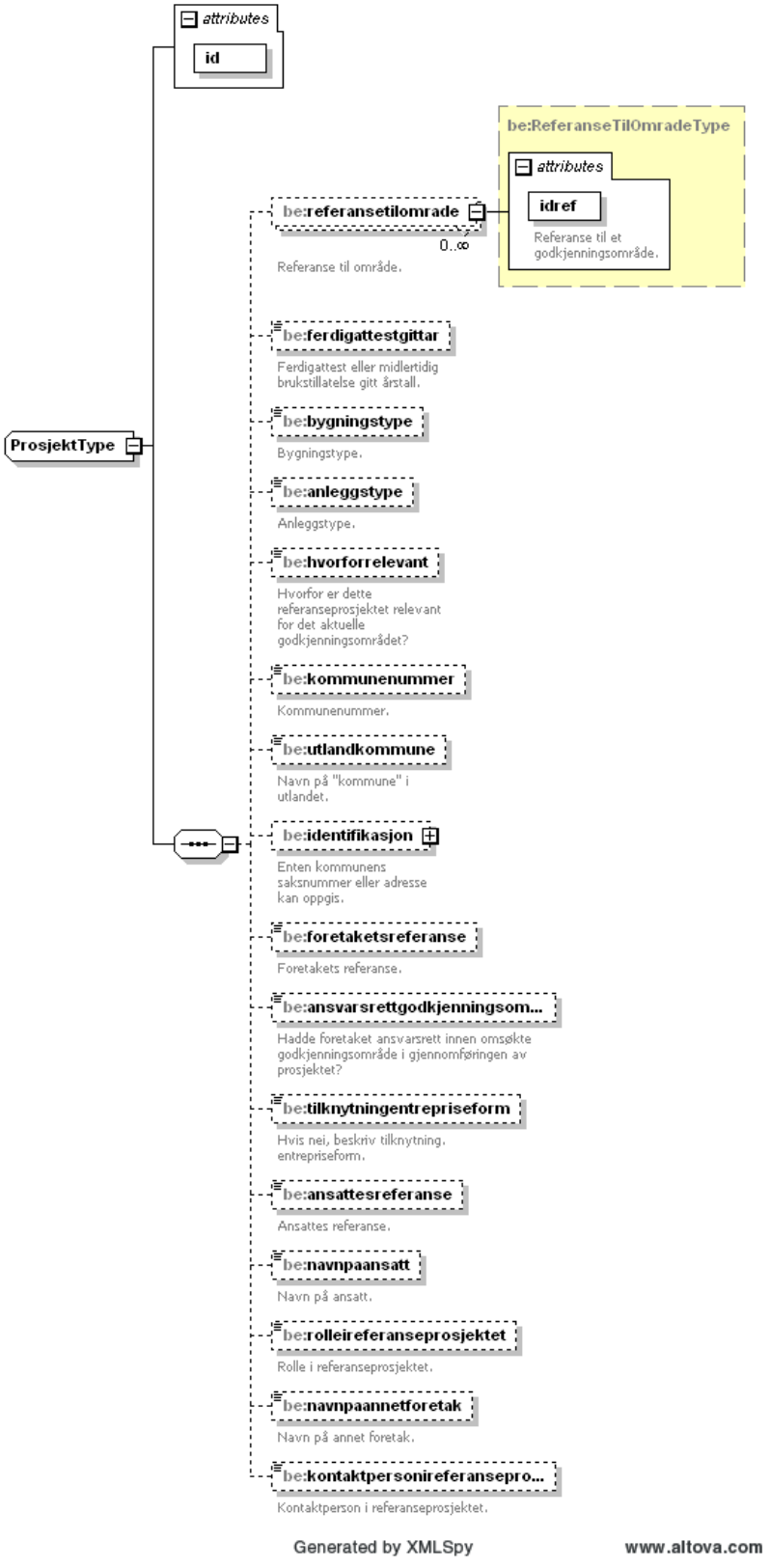


Figure 94 Complex type ProsjektType

7.2.26.1 identifikasjon

The structure of this element is illustrated in Figure 95.

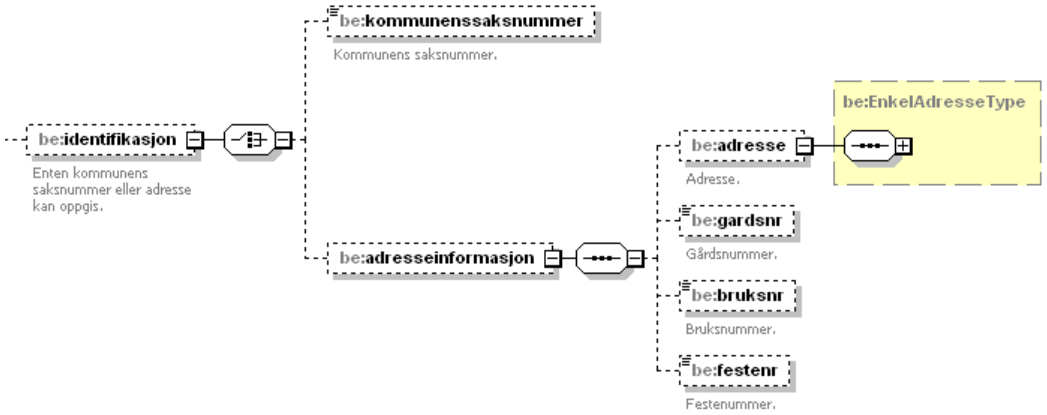


Figure 95'identifikasjon' within ProsjektType

It consists of a choice between the following elements:

- "kommunesaksnummer" of type string
- "adresseinformasjon"

The nested element "adresseinformasjon" consists of the following sequence of elements:

- "adresse" of type EnkelAdresseType (see section 7.2.13)
- "gardsnr" of type nonNegativeInteger
- "bruksnr" of type nonNegativeInteger
- "festenr" of type nonNegativeInteger

7.2.27 ReferanseTilOmradeType

The structure of the complex type "" is illustrated in Figure 96.

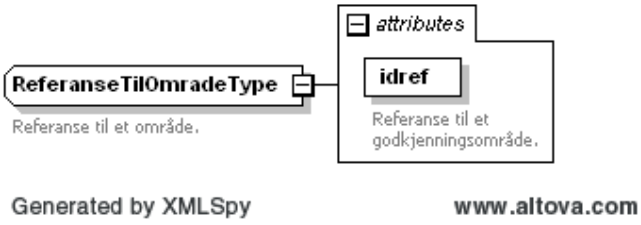


Figure 96 Complex type ReferanseTilOmradeType

The type contains an attribute called "idref".

7.2.28 RevisjonType

The structure of the complex type "" is illustrated in Figure 97.

It consists of the following sequence of elements:

- "erutfort" of type boolean
- "revidertav" of type string
- "sisterevidertdato"of type date

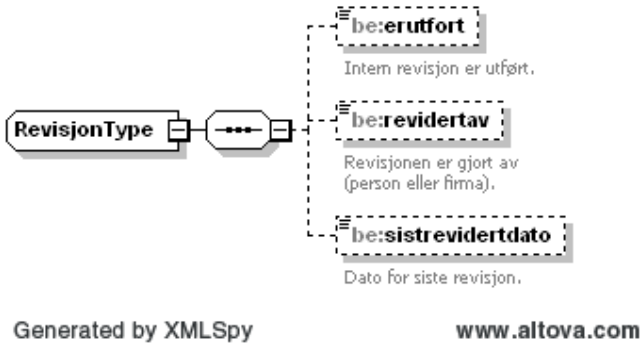


Figure 97 Complex type RevisjonType

7.2.29 SamsvarserkleringType

The structure of the complex type "" is illustrated in Figure 98.

This type is an extension of type ErkleringType (see section 7.2.14)

The extension is a sequence of the following elements:

- "ansvarsrettdato" of type date
- "ansvarsrettavsluttet" of type boolean

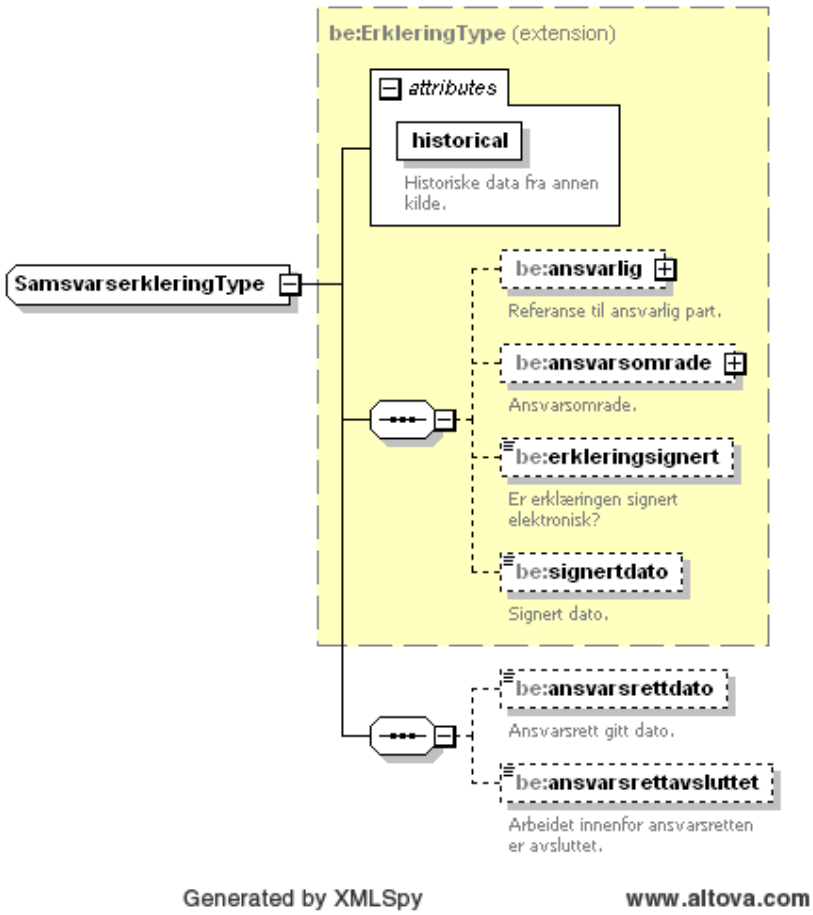


Figure 98 Complex type Samsvarserklering

7.2.30 ThreeStateType

The structure of the complex type "" is illustrated in Figure 99.

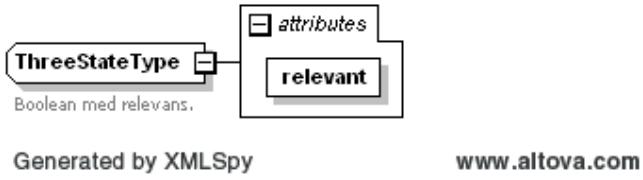


Figure 99 Complex type ThreeStateType

The type is derived from boolean, containing an attribute called "relevant" of type boolean.

7.2.31 TiltakType

The structure of the complex type "" is illustrated in Figure 100.

It consists of the following sequence of (nested) elements:

- "nyebygg"

- "endringbygg"
- "endringboligenhet"
- "endringbruk"
- "riving"
- "installasjoner"
- "innhegning"
- "plasseringmidlertidig" (Included 27. June 2011)
- "matrikkelenhet"

All these nested elements will be presented in the following sub sections.

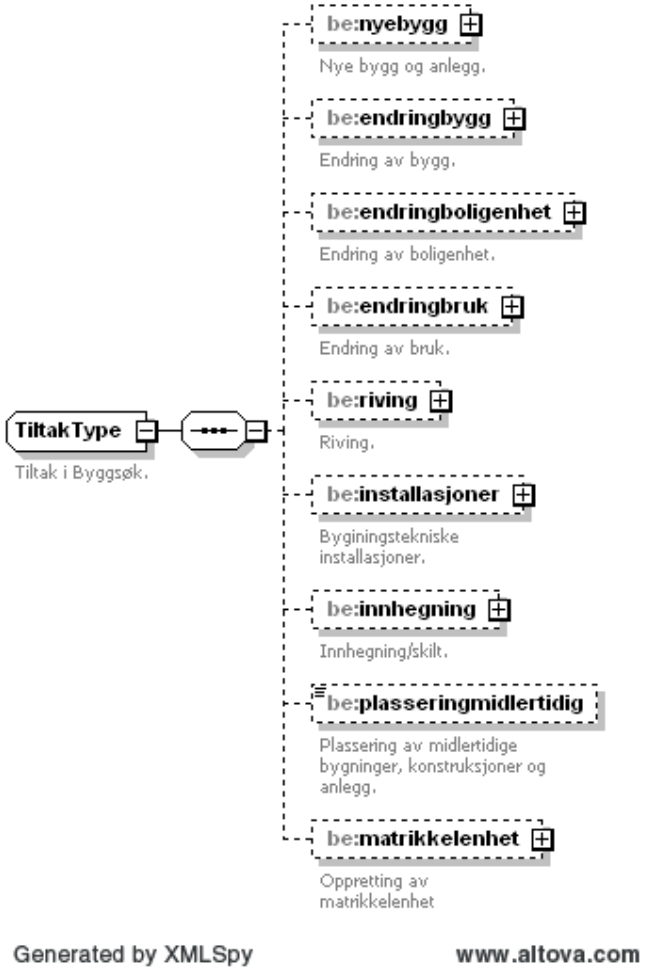


Figure 100 Complex type TiltakType

7.2.31.1 nyebygg

The structure of this element is illustrated in Figure 101.

It consists of the following sequence of elements:

- “nyttbygg”
- “veg”
- “parkeringsplass”
- “terrenginngrep”
- “nyttanlegg”

The element “nyttbygg” consists of a choice between the following elements:

- “boligformal”
- “over70m2”
- “under70m2”
- “driftsbygningover1000m2”
- “driftsbygningunder1000m2”

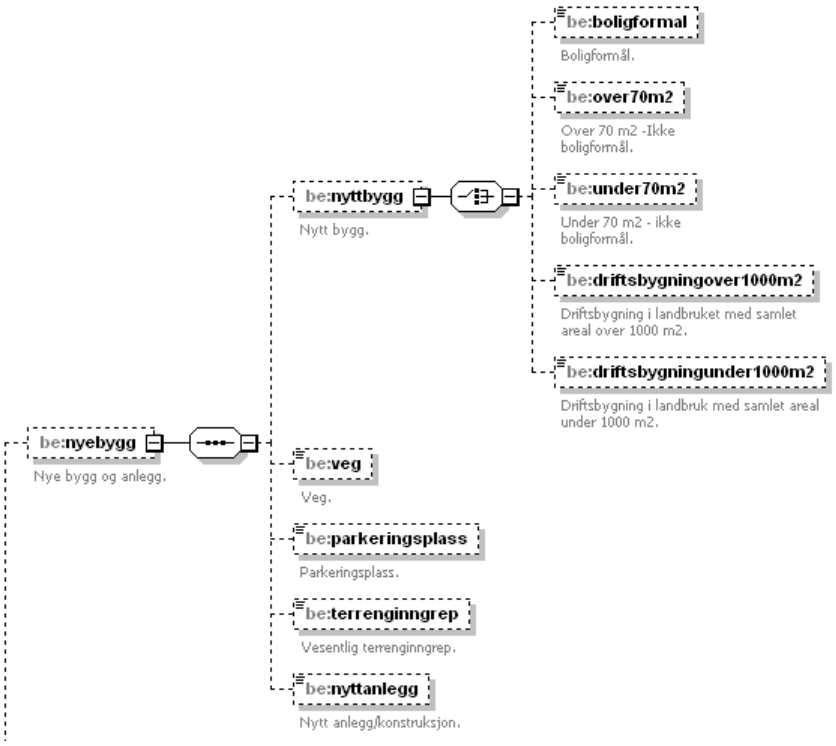


Figure 101 ”nyebygg” within TiltakType

7.2.31.2 endringbygg

The structure of this element is illustrated in Figure 102.

It consists of the following sequence of elements:

- “innvendig”
- “utvendig”
- “driftsbygning”
- “annet”

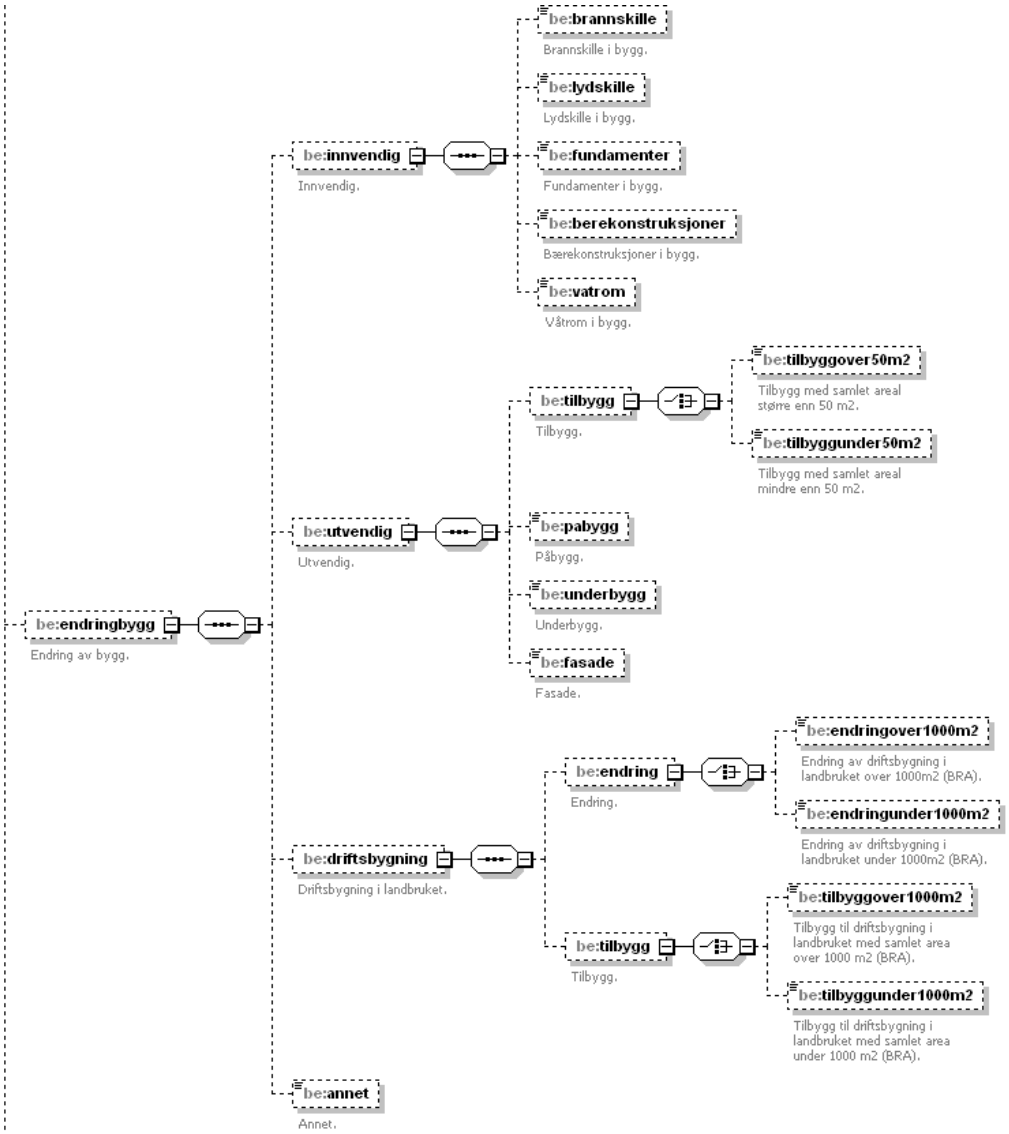


Figure 102 ”endringbygg” within TiltakType

The element “innvendig” consists of the following sequence of elements:

- “brannskille”
- “lydskille”
- “fundamenter”
- “berekonstruksjoner”
- “vatrom”

The element “utvendig” consists of the following sequence of elements:

- "tilbygg", a choice between the elements:
    - tilbyggover50m2
    - tilbyggunder50m2
- "pabygg"
- "underbygg"
- "fasade"

The element "driftsbygning" consists of the following sequence of elements:

- "endring", a choice between the elements:
    - "endringover1000m2"
    - "endringunder1000m2"
- "tilbygg", a choice between the elements:
    - "tilbyggover1000m2"
    - "tilbyggunder1000m2"

7.2.31.3 endringboligenhet

The structure of this element is illustrated in Figure 103.

It consists of the following sequence of elements:

- "sammenslaing"
- "oppdeling"

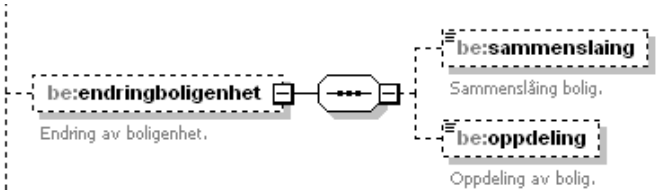


Figure 103 "endringboligenhet" within TiltakType

7.2.31.4 endringbruk

The structure of this element is illustrated in Figure 104.

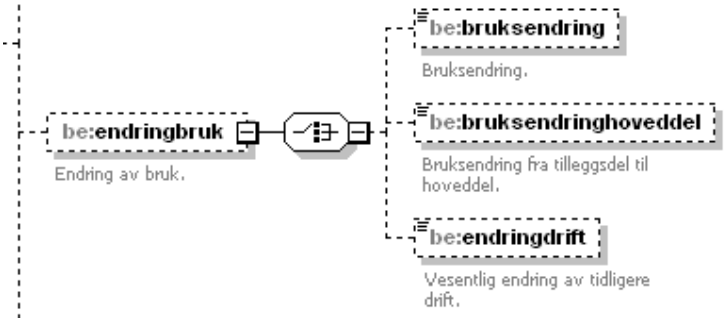


Figure 104 'endringbruk' within TiltakType

The element consists of a choice between the elements:

- "bruksendring"
- "bruksendringhoveddel"
- "endringdrift"

7.2.31.5 riving

The structure of this element is illustrated in Figure 105.

The element consists of a choice between the elements:

- "helebygg"
- "bygningunder70m2"
- "tilbygginntil50m2"
- "driftsbygninginntil1000m2"
- "delerbygg"

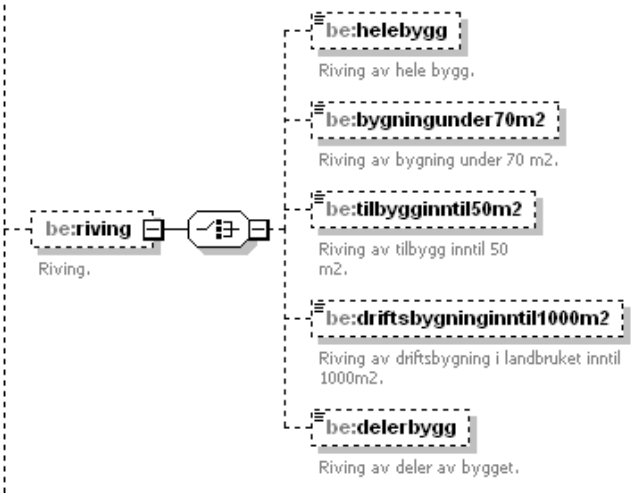


Figure 105 'riving' within TiltakType

7.2.31.6 installasjoner

The structure of this element is illustrated in Figure 106.

The element consists of a choice between the elements:

- "nyttanlegg"
- "endring", a sequence of
    - "utvendigeinstallasjoner"
    - "installasjonibygg"
- "reparasjon"

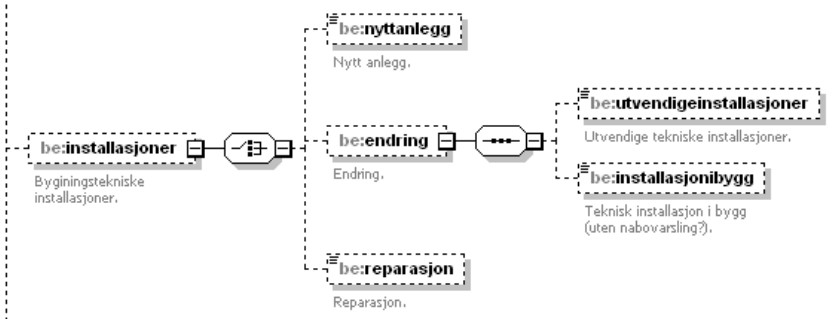


Figure 106 'installasjoner' within TiltakType

7.2.31.7 innhegning

The structure of this element is illustrated in Figure 107.

It consists of the following sequence of elements:

- “skiltreklame”
- “innhegning”
- “antennesystem”

The element “skiltreklame”consists of a choice between the elements:

- “frittstaendeliten”
- “frittstaendestor”
- “fasadeliten”
- “fasadestor”

The element “antennesystem” consists of a choice between the elements:

- “antenneinntil5m”
- “antenneover5m”

Figure 107 ’innhegning’ within TiltakType

7.2.31.8 matrikkelenhet

The structure of this element is illustrated in Figure 108.

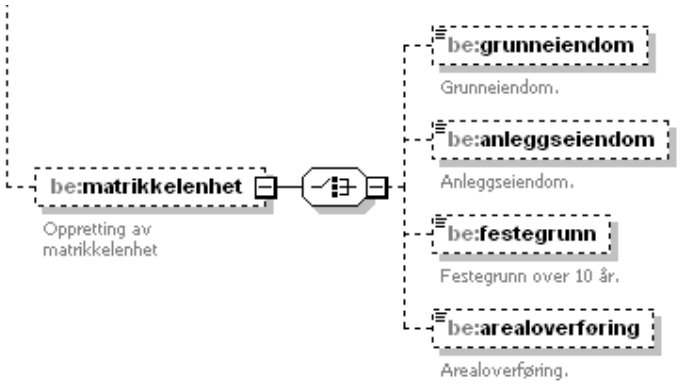


Figure 108 'matrikkelenhet' within TiltakType

The element consists of a choice between the elements:

- "grunneiendom"
- "anleggseiendom"
- "festegrunn"
- "arealoverføring"

7.2.32 UtdanningType

The structure of the complex type is illustrated in Figure 109.

It consists of the following sequence of elements:

- "hoyeregrad" of type boolean
- "laveregrad" of type boolean
- "fagskole" of type boolean
- "fagbrev" of type boolean
- "annenkompetanse" of type boolean
- "beskrivelseannenkompetanse" of type string

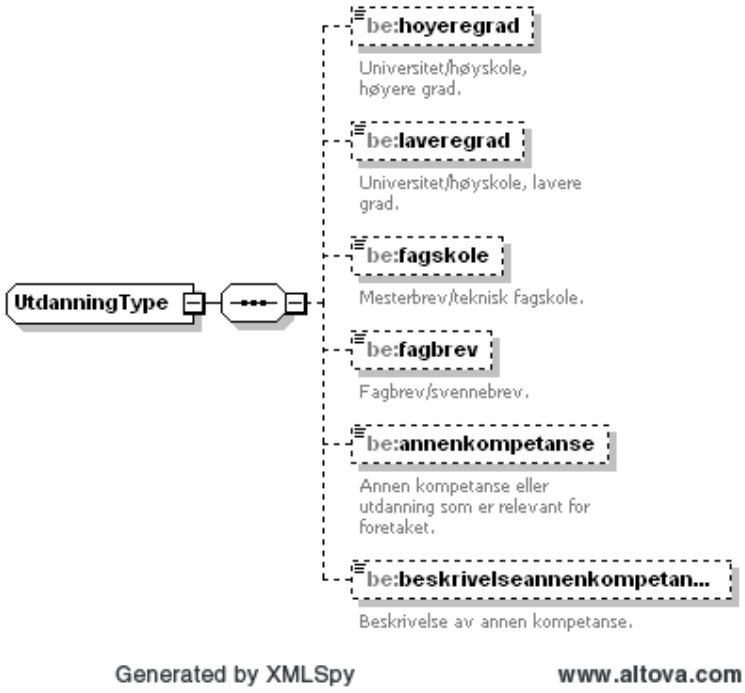


Figure 109 Complex type UtdanningType

7.2.33 VarighetUtdanningType

The structure of the complex type is illustrated in Figure 110.

It consists of the following sequence of elements:

- "varighet0til3" of type nonNegativeInteger
- "varighet3til7" of type nonNegativeInteger
- "varighet8pluss" of type nonNegativeInteger
- "varighettotalt" of type nonNegativeInteger

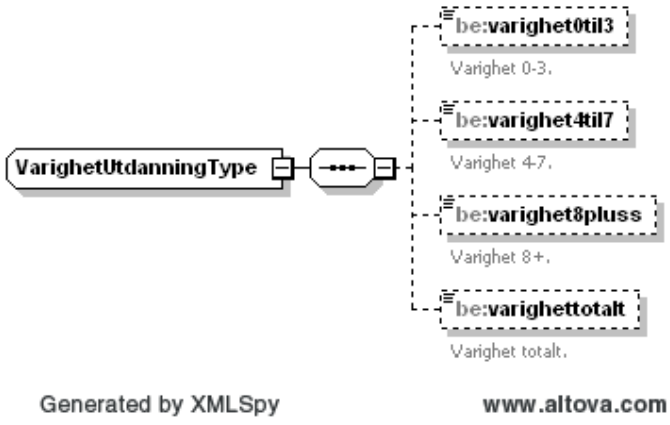


Figure 110 Complex type VarighetUtdanningType

7.2.34 VedleggType

The structure of the complex type is illustrated in Figure 111.

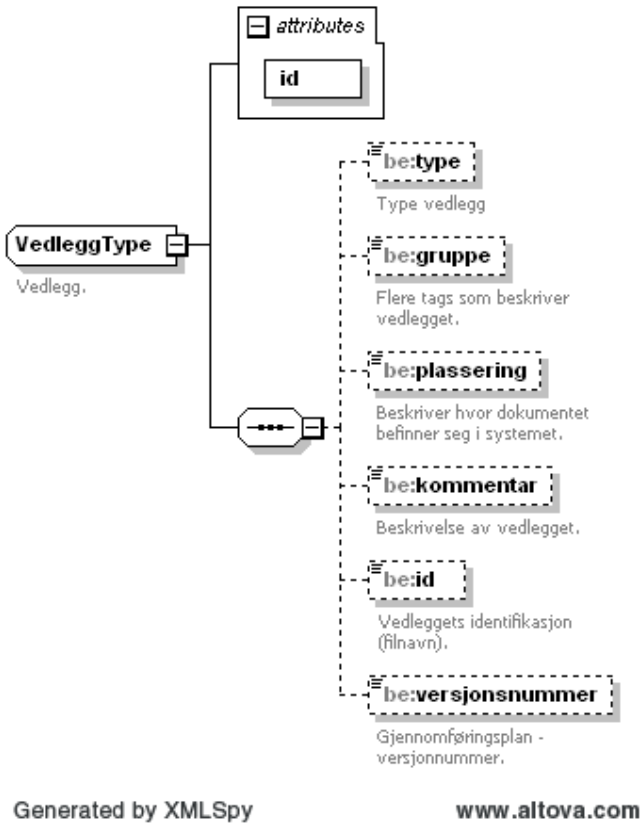


Figure 111 Complex type VedleggType

The type contains an attribute called “id” of predefined type ID.

It consists of the following sequence of elements:

- “type” based on type string, restricted to the following enumeration values:
    - tegning_eks_plan, tegning_eks_snitt, tegning_eks_fasade, tegning_ny_plan, tegning_ny_snitt, tegning_ny_fasade, situasjonskart, situasjonsplan, avkjoerselplan, foto, beskrivelse, annet, redegjørelse_ras_og_flomfare, redegjørelse_miljøforhold, redegjørelse_grunnforhold, redegjørelse_forurenset_grunn, forhåndskonferanse, redegjørelse_estetikk, uttalelse_fra_offentlig_myndighet, naboprotester, merknader_til_naboprotester, kart, kontrollplan, varsling, forbedringstiltak, organisasjonsplan, revisjonserklering
- “gruppe” of type VedleggsgruppeType (see section 7.3.35)
- “plassering” based on type string, restricted to the following enumeration values:
    - elektronisk, papir

- "kommentar" of type string
- "id" of type string
- "versjonsnummer"

7.2.35 VolumType

The structure of the complex type is illustrated in Figure 112.

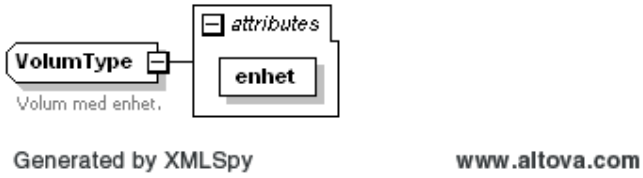


Figure 112 Complex type VolumType

The type is an extension of type decimal, extended with an attribute called "enhet" of type VolumenhetType (see section 7.3.38).

7.3 Simple (enumeration) types

This section, with subsections, are documenting the simple enumeration types defined in common.xsd.

(Changed 27. June 2011: Removed unused enumeration type "SoknadstypeType.)

7.3.1 AnleggstypekodeType

The following comment is associated: "Verdier for anleggstypekode".

It defines an enumeration having the following predefined values:

veier	jernbaner	havner	vann	kraftlinjer	kraftstasjoner
industri	flyplasser	jordbruk	fiske	olje	militaere
underjordiske	forstoettingsmur	svømmebasseng	fjernvarmeanlegg	brygger	andre

7.3.2 AnsvarsomradeType

The following comment is associated: "Verdier for hva et ansvarsområde er kontrollert for".

It defines an enumeration having the following predefined values:

rammetillatelse	igangsettingstillatelse	ett-trinns søknad
midlertidig brukstillatelse	ferdigattest	

7.3.3 ArealenhetType

The following comment is associated: "Verdier for arealenheter".

It defines an enumeration having the following predefined values:

kvadratmeter	kvadratkilometer	dekar

7.3.4 AvlopTilknytningstypeType

The following comment is associated: "Verdier for tilknytning til avløp".

It defines an enumeration having the following predefined values:

offentlig avløpsanlegg	privat avløpsanlegg	ikke relevant

7.3.5 BeregningsregelType

The following comment is associated: "Verdier for beregningsregel".

It defines an enumeration having the following predefined values:

prosent bya	bya	prosent bra
bra	u-grad	annet

7.3.6 BooleanDelvisType

The following comment is associated: "Verdier for boolean + delvis".

It defines an enumeration having the following predefined values:

true	false	delvis

7.3.7 BSSoknadstypeType

The following comment is associated: "Verdier for søknadstype i Byggsøk".

It defines an enumeration having the following predefined values:

soknad rammetillatelse	nabovarsel	dispensasjon
soknad tiltak uten ansvar	ett-trinns soknad	soknad igangsettingstillatelse
soknad midlertidig brukstillatelse	soknad ferdigattest	soknad endring tillatelse

(Changed 27. June 2011: One value changed from “soknad tillatelse tiltak” to “soknad tiltak uten ansvar”.)

7.3.8 BygningstypekodeType

The following comment is associated: “Verdier for bygningstypekode”.

It defines an enumeration having the following predefined values, three digit codes, and associated explanations:

111	Enebolig
112	Enebolig med hybel/sokkelleilighet
113	Våningshus
121	Tomannsbolig, vertikaldelt
122	Tomannsbolig, horisontaldelt
123	Våningshus tomannsbolig, vertikaldelt
124	Våningshus tomannsbolig, horisontaldelt
131	Rekkehus med 3-4 boliger
133	Kjede-/atriumhus, inntil 4 boliger
135	Terassehus
136	Andre småhus med 3-4 bolighus
141	Stort frittliggende boligbygg på 2 et.
142	Stort frittliggende boligbygg på 3 og 4 et.
143	Stort frittliggende boligbygg på 5 et. eller mer
144	Store sammenbygde boligbygg på 2 et.
145	Store sammenbygde boligbygg på 3 og 4 et.
146	Store sammenbygde boligbygg på 5 et. eller mer
151	Bo- og servicesenter
152	Studenthjem/studentboliger
159	Annen bygning for bofellesskap eller bygning som har nær tilknytning til/tjener slike bygninger

161	Stort frittliggende boligbygg på 2 et.
162	Helårsbolig som benyttes som fritidsbolig
163	Våningshus som benyttes som fritidsbolig
171	Seterhus, sel, rorbu og liknende
172	Skogs- og utmarkskoie, gamme
181	Garasje, uthus, anneks til bolig
182	Garasje, uthus, anneks til fritidsbolig
193	Boligbrakker
199	Annen boligbygning (sekundærbolig reindrift)
211	Fabrikkbygning
212	Verkstedsbygning
214	Bygning for renseanlegg
216	Bygning for vannforsyning
219	Annen industribygning eller bygning som har nær tilknytning til/tjener slike bygninger
221	Kraftstasjon (> 15 000 kVA)
223	Transformatorstasjon (> 10 000 kVA)
229	Annen energiforsyning eller bygning som har nær tilknytning til/tjener slike bygninger
231	Lagerhall
232	Kjøle- og fryselager
233	Silobygning
239	Annen lagerbygning eller bygning som har nær tilknytning til/tjener slike bygninger
241	Hus for dyr/landbruk, lager/silo
243	Veksthus
244	Driftsbygning fiske/fangst/oppdrett

245	Naust/redskapshus for fiske
248	Annen fiskeri- og fangstbygning
249	Annen landbruksbygning eller bygning som har nær tilknytning til/tjener slike bygninger
311	Kontor- og administrasjonsbygning, rådhus
312	Bankbygning, posthus
313	Mediabygning
319	Annen kontorbygning eller bygning som har nær tilknytning til/tjener slike bygninger
321	Kjøpesenter, varehus
322	Butikk/forretningsbygning
323	Bensinstasjon
329	Annen forretningsbygning eller bygning som har nær tilknytning til/tjener slike bygninger
330	Messe- og kongressbygning
411	Ekspedisjonsbygning, flyterminal, kontrolltårn
412	Jernbane- og T-banestasjon
415	Godsterminal
416	Postterminal
419	Annen ekspedisjon- og terminalbygning eller bygning som har nær tilknytning til/tjener slike bygninger
429	Telekommunikasjonsbygning
431	Parkeringshus
439	Annen garasje/-hangarbygning eller bygning som har nær tilknytning til/tjener slike bygninger
441	Trafikktilsynsbygning eller bygning som har nær tilknytning til/tjener slike bygninger
449	Annen veg- og biltilsynsbygning eller bygning som har nær tilknytning til/tjener slike bygninger

511	Hotellbygning
512	Motellbygning
519	Annen hotellbygning eller bygning som har nær tilknytning til/tjener slike bygninger
521	Hospits, pensjonat
522	Vandrer-/feriehjem
523	Appartement
524	
529	Camping/utleiehytte
531	Annen bygning for overnatting eller bygning som har nær tilknytning til/tjener slike bygninger
532	Restaurantbygning, kafébygning
533	Sentralkjøkken, kantinebygning
539	Gatekjøkken, kioskbygning
611	Lekepark
612	Barnehage
613	Barneskole
614	Ungdomsskole
615	Kombinert barne- ungdomsskole
616	Videregående skole
619	Annen skolebygning eller bygning som har nær tilknytning til/tjener slike bygninger
621	Universitet/høgskole m/auditorium, lesesal mv.
623	Laboratoriebygning
629	Annen universitets-, høgskole og forskningsbygning eller bygning som har nær tilknytning til/tjener slike bygninger
641	Museum, kunstgalleri

642	Bibliotek/mediatek
643	Zoologisk-/botanisk hage (bygning)
649	Annen museums-/biblioteksbygning eller bygning som har nær tilknytning til/tjener slike bygninger
651	Idrettshall
652	Ishall
653	Svømmehall
654	Tribune og idrettsgardereobe
655	Helsestudio
659	Annen idrettsbygning eller bygning som har nær tilknytning til/tjener slike bygninger
661	Kino-/teater-/opera-/konsertbygning
662	Samfunnshus, grendehus
663	Diskotek
669	Annet kulturhus eller bygning som har nær tilknytning til/tjener slike bygninger
671	Kirke, kapell
672	Bedehus, menighetshus
673	Krematorium/gravkapell/bårehus
674	Synagoge, moske
675	Kloster
679	Annen bygning for relilgiøse aktiviteter eller bygning som har nær tilknytning til/tjener slike bygninger
719	Sykehus eller bygning som har nær tilknytning til/tjener slike bygninger
721	Sykehjem
722	Bo- og behandlingssenter
723	Rehabiliteringsinstitusjon, kurbad
729	Annet sykehjem eller bygning som har nær tilknytning til/tjener slike bygninger

731	Klinikk, legekontor/-senter/-vakt
732	Helse-/sosialsenter, helsestasjon
739	Annen primærhelsebygning eller bygning som har nær tilknytning til/tjener slike bygninger
819	Fengselsbygning eller bygning som har nær tilknytning til/tjener slike bygninger
821	Politistasjon
822	Brannstasjon, ambulansestasjon
823	Fyrstasjon, losstasjon
824	Stasjon for radarovervåk. av fly-/skipstrafikk
825	Tilfluktsrom/bunker
829	Annen beredskapsbygning eller bygning som har nær tilknytning til/tjener slike bygninger
830	Monument
840	Offentlig toalett

7.3.9 CountryCodeType

The following comment is associated: "Verdier for landskode".

It defines an enumeration having the following predefined values:

AF	AL	DZ	AS	AD	AO	AI	AQ	AG	AR
AM	AW	AU	AT	AZ	BS	BH	BD	BB	BY
BE	BZ	BJ	BM	BT	BO	BA	BW	BV	BR
IO	BN	BG	BF	BI	KH	CM	CA	CV	KY
CF	TD	CL	CN	CX	CC	CO	KM	CG	CD
CK	CR	CI	HR	CU	CY	CZ	DK	DJ	DM
DO	TP	EC	EG	SV	GQ	ER	EE	ET	FK
FO	FJ	FI	FR	GF	PF	TF	GA	GM	GE
DE	GH	GI	GR	GL	GD	GP	GU	GT	GN

GW	GY	HT	HM	VA	HN	HK	HU	IS	IN
ID	IR	IQ	IE	IL	IT	JM	JP	JO	KZ
KE	KI	KP	KR	KW	KG	LA	LV	LB	LS
LR	LY	LI	LT	LU	MO	MK	MG	MW	MY
MV	ML	MT	MH	MQ	MR	MU	YT	MX	FM
MD	MC	MN	MS	MA	MZ	MM	NA	NR	NP
NL	AN	NC	NZ	NI	NE	NG	NU	NF	MP
NO	OM	PK	PW	PS	PA	PG	PY	PE	PH
PN	PL	PT	PR	QA	RE	RO	RU	RW	SH
KN	LC	PM	VC	WS	SM	ST	SA	SN	SC
SL	SG	SK	SI	SB	SO	ZA	GS	ES	LK
SD	SR	SJ	SZ	SE	CH	SY	TW	TJ	TZ
TH	TG	TK	TO	TT	TN	TR	TM	TC	TV
UG	UA	AE	GB	US	UM	UY	UZ	VU	VE
VN	VG	VI	WF	EH	YE	YU	ZM	ZW	

7.3.10 DispensasjonsType

The following comment is associated: "Verdier for hva det kan søkes om dispensasjon fra.".

It defines an enumeration having the following predefined values:

plan og bygningsloven med forskrifter	kommunale vedtekter til pbl	arealplaner	vegloven

7.3.11 EnergikildeType

The following comment is associated: "Verdier for energikilde."

It defines an enumeration having the following predefined values:

elektrisitet	olje parafin	biobrensel	solenergi	varmepumpe luft

varmepumpe berg sjø	gass	fjernvarme spillvarme	annet	ikke relevant

7.3.12 FagomradeKontrollType

The following comment is associated: ”Verdier for fagområder ved kontroll”.

It defines an enumeration having the following predefined values, six (or seven) letter codes, and associated explanations:

KOVKON	Overordnet ansvar for uavhengig kontroll
KOVPRO	Overordnet ansvar for prosjektering (bygning, anlegg eller konstruksjon, tekniske installasjoner)
KARKIT	Arkitektur
KUTEAR	Utearealer og landskapsutforming
KOPPMA	Oppmålingsteknisk prosjektering
KBRANN	Sikkerhet ved brann
KGEOTEK	Geoteknikk
KKONST	Konstruksjonssikkerhet
KBYGNI	Bygningsfysikk (energi-, innemiljø)
KSANIT	Sanitær-, varme- og slukkeinstallasjoner
KPVENT	Ventilasjon- og klimainstallasjoner
KVANNF	Vannforsynings-, avløps- og fjernvarmeanlegg
KPLOFT	Løfteinnretninger
KLYDFO	Lydforhold og vibrasjoner
KMILJO	Miljøsanering
KOVUTF	Overordnet ansvar for utførelse (bygning, anlegg eller konstruksjon, tekniske installasjoner)
KINNMA	Innmåling og utstikking av tiltak
KGRUNN	Grunn- og terrengarbeid (inkl. VA-ledninger)
KPLASS	Plasstøpte betongkonstruksjoner

KTOMRE	Tømrerarbeid og montering av trekonstruksjoner
KMURAR	Murarbeid
KMETAL	Montering av bærende metall- eller betongkonstruksjoner
KGLASS	Montering av glasskonstruksjoner og fasadekledning
KTAKTE	Taktekkingsarbeid
KBEVBY	Arbeid på bevaringsverdige byggverk
KINSBR	Installasjon av brannalarm, nødlys og ledesystem
KUSANI	Sanitær-, varme- og slukkeinstallasjoner
KUVENT	Ventilasjon- og klimainstallasjoner
KULOFT	Løfteinnretninger
KRIVIN	Riving og miljøsanering

7.3.13 FagomradePBL2003Type

The following comment is associated: "Verdier for fagområder før 2010-standard."

It defines an enumeration having the following predefined values:

bygg	anlegg

7.3.14 FagomradeProsjekteringType

The following comment is associated: "Verdier for fagområder ved prosjektering."

It defines an enumeration having the following predefined values, six letter codes, and associated explanations:

POVPRO	Overordnet ansvar for prosjektering (bygning, anlegg eller konstruksjon, tekniske installasjoner)
PARKIT	Arkitektur
PUTEAR	Utearealer og landskapsutforming
POPPMA	Oppmålingsteknisk prosjektering
PBRANN	Sikkerhet ved brann

PGEOTEK	Geoteknikk
PKONST	Konstruksjonssikkerhet
PBYGNI	Bygningsfysikk (energi-, innemiljø)
PSANIT	Sanitær-, varme- og slukkeinstallasjoner
PVENTI	Ventilasjon- og klimainstallasjoner
PVANNF	Vannforsynings-, avløps- og fjernvarmeanlegg
PLOFTE	Løfteinnretninger
PLYDFO	Lydforhold og vibrasjoner
PMILJO	Miljøsanering

7.3.15 FagomradeUtforelseType

The following comment is associated: "Verdier for fagområder ved utførelse."

It defines an enumeration having the following predefined values, six letter codes, and associated explanations:

UOVUTF	Overordnet ansvar for utførelse (bygning, anlegg eller konstruksjon, tekniske installasjoner)
UINNMA	Innmåling og utstikking av tiltak
UGRUNN	Grunn- og terrengarbeid (inkl. VA-ledninger)
UPLASS	Plasstøpte betongkonstruksjoner
UTOMRE	Tømrerarbeid og montering av trekonstruksjoner
UMURAR	Murarbeid
UMETAL	Montering av bærende metall- eller betongkonstruksjoner
UGLASS	Montering av glasskonstruksjoner og fasadekledning
UTAKTE	Taktekkingsarbeid
UBEVBY	Arbeid på bevaringsverdige byggverk
UINSBR	Installasjon av brannalarm, nødlys og ledesystem
USANIT	Sanitær-, varme- og slukkeinstallasjoner

UVENTI	Ventilasjon- og klimainstallasjoner
ULOFTE	Løfteinnretninger
URIVIN	Riving og miljøsanering

7.3.16 FunksjonsType

The following comment is associated: "Verdier for funksjon i henhold til godkjenningsområder."

It defines an enumeration having the following predefined values:

SOK	PRO	UTF	KTR

7.3.17 GodkjenningsstatusType

The following comment is associated: "Verdier for godkjenningsstatus."

It defines an enumeration having the following predefined values:

innvilget	utgatt	fratatt	avslatt

7.3.18 KommunenummerType

The following comment is associated: "Verdier for kommunenummer".

It defines an enumeration having the following predefined values, four digit codes, and associated explanations:

0101	Halden
0104	Moss
0105	Sarpsborg
0106	Fredrikstad
0111	Hvaler
0118	Aremark
0119	Marker
0121	Rømskog

0122	Trøgstad
0123	Spydeberg
0124	Askim
0125	Eidsberg
0127	Skiptvedt
0128	Rakkestad
0135	Råde
0136	Rygge
0137	Våler
0138	Hobbøl
0211	Vestby
0213	Ski
0214	Ås
0215	Frogn
0216	Nesodden
0217	Oppegård
0219	Bærum
0220	Asker
0221	Aurskog-Høland
0226	Sørum
0227	Fet
0228	Rælingen
0229	Enebakk
0230	Lørenskog
0231	Skedsmo

0233	Nittedal
0234	Gjerdrum
0235	Ullensaker
0236	Nes
0237	Eidsvoll
0238	Nannestad
0239	Hurdal
0301	Oslo
0402	Kongsvinger
0403	Hamar
0412	Ringsaker
0415	Løten
0417	Stange
0418	Nord-Odal
0419	Sør-Odal
0420	Eidskog
0423	Grue
0425	Åsnes
0426	Våler
0427	Elverum
0428	Trysil
0429	Åmot
0430	Stor-Elvdal
0432	Rendalen
0434	Engerdal

0436	Tolga
0437	Tynset
0438	Alvdal
0439	Folldal
0441	Os
0501	Lillehammer
0502	Gjøvik
0511	Dovre
0512	Lesja
0513	Skjåk
0514	Lom
0515	Vågå
0516	Nord-Fron
0517	Sel
0519	Sør-Fron
0520	Ringebu
0521	Øyer
0522	Gausdal
0528	Østre Toten
0529	Vestre Toten
0532	Jevnaker
0533	Lunner
0534	Gran
0536	Søndre Land
0538	Nordre Land

0540	Sør-Aurdal
0541	Etnedal
0542	Nord-Aurdal
0543	Vestre Slidre
0544	Øystre Slidre
0545	Vang
0602	Drammen
0604	Kongsberg
0605	Ringerike
0612	Hole
0615	Flå
0616	Nes
0617	Gol
0618	Hemsedal
0619	Ål
0620	Hol
0621	Sigdal
0622	Krødsherad
0623	Modum
0624	Øvre Eiker
0625	Nedre Eiker
0626	Lier
0627	Røyken
0628	Hurum
0631	Flesberg

0632	Rollag
0633	Nore og Uvdal
0701	Horten
0702	Holmestrand
0704	Tønsberg
0706	Sandefjord
0709	Larvik
0711	Svelvik
0713	Sande
0714	Hof
0716	Re
0719	Andebu
0720	Stokke
0722	Nøtterøy
0723	Tjøme
0728	Lardal
0805	Porsgrunn
0806	Skien
0807	Notodden
0811	Siljan
0814	Bamble
0815	Kragerø
0817	Drangedal
0819	Nome
0821	Bø

0822	Sauherad
0826	Tinn
0827	Hjartdal
0828	Seljord
0829	Kviteseid
0830	Nissedal
0831	Fyresdal
0833	Tokke
0834	Vinje
0901	Risør
0904	Grimstad
0906	Arendal
0911	Gjerstad
0912	Vegårshei
0914	Tvedestrand
0919	Froland
0926	Lillesand
0928	Birkenes
0929	Åmli
0935	Iveland
0937	Evje og Hornnes
0938	Bygland
0940	Valle
0941	Bykle
1001	Kristiansand

1002	Mandal
1003	Farsund
1004	Flekkefjord
1014	Vennesla
1017	Songdalen
1018	Søgne
1021	Marnardal
1026	Åseral
1027	Audnedal
1029	Lindesnes
1032	Lyngdal
1034	Hægebostad
1037	Kvinesdal
1046	Sirdal
1101	Eigersund
1102	Sandnes
1103	Stavanger
1106	Haugesund
1111	Sokndal
1112	Lund
1114	Bjerkreim
1119	Hå
1120	Klepp
1121	Time
1122	Gjesdal

1124	Sola
1127	Randaberg
1129	Forsand
1130	Strand
1133	Hjelmeland
1134	Suldal
1135	Sauda
1141	Finnøy
1142	Rennesøy
1144	Kvitsøy
1145	Bokn
1146	Tysvær
1149	Karmøy
1151	Utsira
1160	Vindafjord
1201	Bergen
1211	Etne
1216	Sveio
1219	Bømlo
1221	Stord
1222	Fitjar
1223	Tysnes
1224	Kvinnherad
1227	Jondal
1228	Odda

1231	Ullensvang
1232	Eidfjord
1233	Ulvik
1234	Granvin
1235	Voss
1238	Kvam
1241	Fusa
1242	Samnanger
1243	Os
1244	Austevoll
1245	Sund
1246	Fjell
1247	Askøy
1251	Vaksdal
1252	Modalen
1253	Osterøy
1256	Meland
1259	Øygarden
1260	Radøy
1263	Lindås
1264	Austrheim
1265	Fedje
1266	Masfjorden
1401	Flora
1411	Gulen

1412	Solund
1413	Hyllestad
1416	Høyanger
1417	Vik
1418	Balestrand
1419	Leikanger
1420	Sogndal
1421	Aurland
1422	Lærdal
1424	Årdal
1426	Luster
1428	Askvoll
1429	Fjaler
1430	Gaular
1431	Jølster
1432	Førde
1433	Naustdal
1438	Bremanger
1439	Vågsøy
1441	Selje
1443	Eid
1444	Hornindal
1445	Gloppen
1449	Stryn
1502	Molde

1504	Ålesund
1505	Kristiansund
1511	Vanylven
1514	Sande
1515	Herøy
1516	Ulstein
1517	Hareid
1519	Volda
1520	Ørsta
1523	Ørskog
1524	Norddal
1525	Stranda
1526	Stordal
1528	Sykkylven
1529	Skodje
1531	Sula
1532	Giske
1534	Haram
1535	Vestnes
1539	Rauma
1543	Nesset
1545	Midsund
1546	Sandøy
1547	Aukra
1548	Fræna

1551	Eide
1554	Averøy
1557	Gjemnes
1560	Tingvoll
1563	Sunndal
1566	Surnadal
1567	Rindal
1571	Halsa
1573	Smøla
1576	Aure
1601	Trondheim
1612	Hemne
1613	Snillfjord
1617	Hitra
1620	Frøya
1621	Ørland
1622	Agdenes
1624	Rissa
1627	Bjugn
1630	Åfjord
1632	Roan
1633	Osen
1634	Oppdal
1635	Rennebu
1636	Meldal

1638	Orkdal
1640	Røros
1644	Holtålen
1648	Midtre Gauldal
1653	Melhus
1657	Skaun
1662	Klæbu
1663	Malvik
1664	Selbu
1665	Tydal
1702	Steinkjer
1703	Namsos
1711	Meråker
1714	Stjørdal
1717	Frosta
1718	Leksvik
1719	Levanger
1721	Verdal
1723	Mosvik
1724	Verran
1725	Namdalseid
1729	Inderøy
1736	Snåsa
1738	Lierne
1739	Røyrvik

1740	Namsskogan
1742	Grong
1743	Høylandet
1744	Overhalla
1748	Fosnes
1749	Flatanger
1750	Vikna
1751	Nærøy
1755	Leka
1804	Bodø
1805	Narvik
1811	Bindal
1812	Sømna
1813	Brønnøy
1815	Vega
1816	Vevelstad
1818	Herøy
1820	Alstahaug
1822	Leirfjord
1824	Vefsn
1825	Grane
1826	Hattfjelldal
1827	Dønna
1828	Nesna
1832	Hemnes

1833	Rana
1834	Lurøy
1835	Træna
1836	Rødøy
1837	Meløy
1838	Gildeskål
1839	Beiarn
1840	Saltdal
1841	Fauske
1845	Sørfold
1848	Steigen
1849	Hamarøy
1850	Tysfjord
1851	Lødingen
1852	Tjeldsund
1853	Evenes
1854	Ballangen
1856	Røst
1857	Værøy
1859	Flakstad
1860	Vestvågøy
1865	Vågan
1866	Hadsel
1867	Bø
1868	Øksnes

1870	Sortland
1871	Andøy
1874	Moskenes
1901	Harstad
1902	Tromsø
1911	Kvæfjord
1913	Skånland
1915	Bjarkøy
1917	Ibestad
1919	Gratangen
1920	Lavangen
1922	Bardu
1923	Salangen
1924	Målselv
1925	Sørreisa
1926	Dyrøy
1927	Tranøy
1928	Torsken
1929	Berg
1931	Lenvik
1933	Balsfjord
1936	Karlsøy
1938	Lyngen
1939	Storfjord
1940"	Gáivuotna Kåfjord

1941	Skjervøy
1942	Nordreisa
1943	Kvænangen
2002	Vardø
2003	Vadsø
2004	Hammerfest
2011	Guovdageaidnu Kautokeino
2012	Alta
2014	Loppa
2015	Hasvik
2017	Kvalsund
2018	Måsøy
2019	Nordkapp
2020	Porsanger Porsángu Porsanki
2021	Kárásjohka Karasjok
2022	Lebesby
2023	Gamvik
2024	Berlevåg
2025	Deatnu Tana
2027	Unjárga Nesseby
2028	Båtsfjord
2030	Sør-Varanger
2111	Spitsbergen
2121	Bjørnøya
2131	Hopen

7.3.19 LengdeenhetType

The following comment is associated: “Verdier for lengdeenheter”.

It defines an enumeration having the following predefined values:

milimeter	centimeter	desimeter	meter	kilometer

7.3.20 MyndighetType

The following comment is associated: “Verdier for myndighet”.

It defines an enumeration having the following predefined values:

helsemyndighet	brannvernmyndighet	arbeidsmiljomyndighet	vegmyndighet
havnemyndighet	forurensningsmyndighet	sivilforsvaret	jordlovmyndighet
friluftsmyndighet	kulturminnemyndighet	reindriftsmyndighet	kirkelig myndighet
luftfartsmyndighet	bergverksmyndighet		

7.3.21 NeringsgruppekodeType

The following comment is associated: “Verdier for næringsgruppekode”.

It defines an enumeration having the following predefined values:

A	B	C	D	E	F	G	H	I
J	K	L	M	N	O	Q	X	Y

7.3.22 OvervannType

The following comment is associated: ”Verdier for hva takvann/overvann føres til”.

It defines an enumeration having the following predefined values:

avløpssystem	terreng	ikke relevant

7.3.23 PartRolleType

The following comment is associated: “Verdier for en parts rolle”.

It defines an enumeration having the following predefined values:

tiltakshaver	nabo	ansvarlig søker
ansvarlig prosjekterende	kontroll av prosjektering	ansvarlig utførende
ansvarlig for kontroll av utførelse	selvbygger	myndighet

7.3.24 PlantypeType

The following comment is associated: ”Verdier for plantype”.

It defines an enumeration having the following predefined values:

arealdel av kommuneplan	reguleringsplan	bebyggelsesplan

7.3.25 SaksbehandlerAnsettelsesforholdType

The following comment is associated: ”Verdier for saksbehandlers ansettelsesforhold”.

It defines an enumeration having the following predefined values:

i jobb	permisjon ferie	sluttet

7.3.26 SaksbehandlerFunksjonType

The following comment is associated: “Verdier for saksbehandlers andre funksjoner”.

It defines an enumeration having the following predefined values:

fagligvurderer	kvalitetssikrer

7.3.27 SaksbehandlerRolleType

The following comment is associated: ”Verdier for saksbehandlers rolle”.

It defines an enumeration having the following predefined values:

sysadm	arkivar	leder	saksbehandler	okonomiansvarlig

7.3.28 RomoppvarmingType

The following comment is associated: ”Verdier for romoppvarming”.

It defines an enumeration having the following predefined values:

elektriske panelovner	elektriske varmekabler	vannbåren radiator	vannbåren gulvvarme
luftoppvarming	ovn kamin peis	annet	ikke relevant

7.3.29 SakstypeType

The following comment is associated: ”Verdier for sakstype”.

It defines an enumeration having the following predefined values:

ny soknad	endring eksisterende	fornyelse	soknad etter tilbaketrukket
klage	stedlig tilsyn	dokument tilsyn	

7.3.30 SGSoknadstypeType

The following comment is associated: ”Verdier for søknadstype i Sentral Godkjenning”.

It defines an enumeration having the following predefined values, four letter codes, and associated explanations:

SGNS	Ny søknad
SGEG	Endring av eksisterende godkjenning
SGFO	Fornyelse
SGTG	Søknad etter tilbaketrukket godkjenning
SGKL	Klage
SGST	Stedlig tilsyn.
SGDT	Dokumenttilsyn
SGKF	Søknader 2003

7.3.31 TiltaketsArtType

The following comment is associated: “Verdier for søknadstype”.

It defines an enumeration having the following predefined values, three letter codes, and associated explanations:

100	Skilt/reklame - frittstående

101	Skilt/reklame - fasade
200	Nytt bygg – boligformål – over 70 m²
201	Nytt bygg - boligformål under 70 m²
202	Nytt bygg - ikke boligformål over 70 m²
203	Nytt bygg - ikke boligformål under 70 m²
204	Driftsbygning i landbruk
300	Endring innvendig i bygg - brannskille i bygg
301	Endring innvendig i bygg - lydskille i bygg
302	Endring innvendig i bygg - fundamenter i bygg
303	Endring innvendig i bygg - bærekonstruksjoner i bygg
304	Endring innvendig i bygg - våtrom i bygg
305	Endring innvendig i bygg - teknisk installasjon i bygg
400	Endring av bygg bolig - utvendig tilbygg større enn 50 m²
401	Endring av bygg ikke bolig - utvendig tilbygg større enn 50 m²
402	Endring av bygg bolig - utvendig tilbygg mindre enn 50 m²
403	Endring av bygg ikke bolig - utvendig tilbygg mindre enn 50 m²
404	Endring av bygg bolig - påbygg
405	Endring av bygg ikke bolig - påbygg
406	Endring av bygg bolig - underbygg
407	Endring av bygg ikke bolig - underbygg
408	Endring av bygg - utvendige tekniske installasjoner
409	Endring av bygg - utvendig fasade
500	Endring av bygg - sammenslåing
501	Endring av bygg - sammenslåing bolig
502	Endring av bygg - oppdeling

503	Endring av bygg - oppdeling av bolig
504	Endring av bygg - bruksendring
505	Endring av bygg - bruksendring bolig
506	Endring av bygg - annet
600	Riving av hele bygget
601	Riving av deler av bygget
700	Nytt anlegg - vei
701	Nytt anlegg - parkeringsplass
702	Nytt anlegg - vesentlig terrenginngrep
703	Nytt anlegg - nytt anlegg/konstruksjon
800	Riving av anlegg - vei
801	Riving av anlegg - parkeringsplass
900	Innhengning
950	Dispensasjon
990	Midlertidig bygning
991	Transportabel bygning
992	Midlertidig anlegg
993	Annen midlertidig eller transportabel konstruksjon

7.3.32 TiltaksklasseType

The following comment is associated: "Verdier for tiltaksklasse".

It defines an enumeration having the following predefined values:

1	2	3

7.3.33 UtdanningsNivaType

The following comment is associated: "Verdier for utdanningsnivå".

It defines an enumeration having the following predefined values:

universitet hoyere grad	universitet lavere grad	mesterbrev teknisk fagskole
fagbrev svennebrev	annen relevant kompetanse	

7.3.34 VannforsyningTilknytningstypeType

The following comment is associated: “Verdier for tilknytning til vannforsyning”.

It defines an enumeration having the following predefined values:

offentlig vannverk	privat vannverk	annen privat vannforsyning, innlagt vann"
annen privat vannforsyning, ikke innlagt vann	ikke relevant	

7.3.35 VedleggsgruppeType

The following comment is associated: “Verdier for utdanningsnivå”.

It defines an enumeration having the following predefined values:

A	B	C	D	E	F
G	H	I	J	K	L

7.3.36 VidereSaksbehandlingType

The following comment is associated: “Verdier for videre saksbehandling”.

It defines an enumeration having the following predefined values:

default	send vurderer	send kvalitetssikrer
forelopig svarbrev	retur saksbehandler	ekspeder

7.3.37 VegtypeType

The following comment is associated: Verdier for vegtype”.

It defines an enumeration having the following predefined values:

riksveg	privatveg	kommunalveg

7.3.38 VolumenhetType

The following comment is associated: Verdier for volumenheter".

It defines an enumeration having the following predefined values:

kubikkmeter

7.3.39 VurderingAvReferanseprosjektType

The following comment is associated: Verdier for volumenheter".

It defines an enumeration having the following predefined values:

1	2	3
ikke relevant	palitelighet	dugelighet

7.3.40 VurderingAvGodkjenningsomraderType

The following comment is associated: Verdier for vurdering av godkjenningsområder".

It defines an enumeration having the following predefined values:

innvilget	avslag utdanning praksis	avslag utdanning
avslag praksis	avslag annet	totalavslag

7.4 Simple (pattern) types

This section, with subsections, are documenting the simple pattern types defined in common.xsd.

These types are typically defined as restrictions imposed on the string type.

7.4.1 BolignummerType

The type BolignummerType provides the following pattern: "Mønster for bolignummer: H, U, L eller K etterfulgt av 4 sifre". The XML schema code is defined as follows:

```
<xs:simpleType name="BolignummerType">
  <xs:annotation>
    <xs:documentation>Mønster for bolignummer: H, U, L eller K etterfulgt av 4 sifre.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[HULK][0-9]{4}"/>
  </xs:restriction>
</xs:simpleType>
```

7.4.2 EmailAddressType

The type EmailAddressType provides the following pattern: “Mønster for epostadresse”. The XML schema code is defined as follows:

```
<xs:simpleType name="EmailAddressType">
  <xs:annotation>
    <xs:documentation>Mønster for epostadresse.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}"/>
  </xs:restriction>
</xs:simpleType>
```

7.4.3 NeringskodeType

The type NeringskodeType provides the following pattern: “Mønster for næringskode”. The XML schema code is defined as follows:

```
<xs:simpleType name="NeringskodeType">
  <xs:annotation>
    <xs:documentation>Mønster for næringskode.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string"/>
</xs:simpleType>
```

7.4.4 OrganisasjonsnummerType

The type OrganisasjonsnummerType provides the following pattern: “Mønster for enkelt id-nummer med mulighet for ledende nuller”. The XML schema code is defined as follows:

```
<xs:simpleType name="OrganisasjonsnummerType">
  <xs:annotation>
    <xs:documentation>Mønster for enkelt id-nummer med mulighet for ledende nuller.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9-]+"/>
  </xs:restriction>
</xs:simpleType>
```

7.4.5 PhoneNumberType

The type OrganisasjonsnummerType provides the following pattern: "Mønster for telefonnummer: 3-24 siffre med valgfri pluss foran". The XML schema code is defined as follows:

```
<xs:simpleType name="PhoneNumberType">
  <xs:annotation>
    <xs:documentation>Mønster for telefonnummer: 3-24 siffre med valgfri pluss foran.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="\+?[0-9]{3,24}"/>
  </xs:restriction>
</xs:simpleType>
```

7.4.6 SimpleNumberType

The type SimpleNumberType provides the following pattern: "Mønster for enkelt id-nummer med mulighet for ledende nuller.". The XML schema code is defined as follows:

```
<xs:simpleType name="SimpleNumberType">
  <xs:annotation>
    <xs:documentation>Mønster for enkelt id-nummer med mulighet for ledende nuller.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[0-9]+"/>
  </xs:restriction>
</xs:simpleType>
```

7.4.7 StillingsprosentType

The type StillingsprosentType provides the following pattern: "Mønster for stillingsprosent". The XML schema code is defined as follows:

```
<xs:simpleType name="StillingsprosentType">
  <xs:annotation>
    <xs:documentation>Mønster for stillingsprosent.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:nonNegativeInteger">
    <xs:minInclusive value="0"/>
    <xs:maxInclusive value="100"/>
  </xs:restriction>
</xs:simpleType>
```

7.4.8 StringWithoutBlanksType

The type StringWithoutBlanksType provides the following pattern: "Mønster for string uten blanke". The XML schema code is defined as follows:

```
<xs:simpleType name="StringWithoutBlanksType">
  <xs:annotation>
    <xs:documentation>Mønster for string uten blanke.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:pattern value="[^ ]*"/>
  </xs:restriction>
</xs:simpleType>
```